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UNITED STATES DEPARTMENT OF AGRICULTURE

BULLETIN No. 547

Contribution from the Office of Markets and Rural Organization
CHARLES J. BRAND, Chief

Washington, D. C. ▼ September 19, 1917

COOPERATIVE PURCHASING AND MARKETING ORGANIZATIONS AMONG FARMERS IN THE UNITED STATES

By

O. B. JESNESS, Assistant in Cooperative Organization, and
W. H. KERR, Investigator in Market Business Practice

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EARLY HISTORY AND GROWTH OF COOPERATIVE ORGANIZATION.

FOUNDATION.

While cooperative organization among the farmers of the United States usually is regarded as a movement of recent origin, farmers' organizations existed in this country as early as the latter part of the eighteenth century. The need for organized effort, however, did not become very apparent until about the middle of the nineteenth century. The first half of the nineteenth century was a period of rapid development in agriculture as well as in other industries, but in so far as the farmer was concerned it was largely a period of individual development. The need felt by the farmer for organized effort about 1850 gave rise to a number of attempts at cooperative purchasing and also brought about the promotion of a number of cooperative stores. Coincident with this movement among farmers, a similar movement was inaugurated in certain of the cities. The establishment of cooperative stores among the factory employees in England had proved so successful that employees, especially in New England cities, profiting by the experience of the

English workers, formed similar associations. A number of organizations were formed, but before any extensive efforts of this kind could be carried out the plans for organization were disrupted by the Civil War.

TREND.

After the close of the Civil War there began a general movement of population toward the virgin lands of the Middle West. The conditions resulting from the rapid development in the Middle West led to a widespread demand for cooperative organization among the farmers of that region. The need of organization was not felt so keenly in the Eastern States, where the population was more dense and business was established on a firmer basis. Affairs in the South were badly disorganized as a result of the Civil War. Extensive changes were necessary in the industrial system, and the readjustment took a considerable length of time. Conditions for organization, therefore, were not as favorable as in the Middle West, where the cooperative movement spread with greatest rapidity after it once had started.

TYPES OF ORGANIZATION.

The history of cooperative organization among farmers since the Civil War consists of the growth and decline of a number of organizations. Many of these organizations were of a local nature, while others were State-wide or national in their scope. Among the latter, the Patrons of Husbandry, or The Grange, as the organization is commonly known, is illustrative of the movement during the late sixties and seventies.[1] The Grange is a farmers' fraternal order established in 1867 for educational and social purposes. The National Grange, which is the central organization, was first formed. Later a large number of local granges were organized and in many of the States these formed State Granges. On account of the demand among farmers, the scope of The Grange was soon enlarged to include such activities as cooperative buying and selling. This movement proved to be very popular among the farmers and resulted in the extension of the organization over a large territory in a comparatively short period.

The early growth of The Grange was confined mainly to the North Central States, as conditions in this section were favorable. The rapid growth of the organization brought it to the notice of the rest of the country, so that the movement soon spread to all parts of the United States. The activities entered upon by The Grange included not only purchasing and marketing ventures but also manufacturing enterprises. Some of the undertakings met with success,

[1] For a more complete history of The Grange see: Aiken, D. W., The Grange: its origin, progress, and educational purposes, U. S. Department of Agriculture Special Report 55, 1883; Atkeson, T. C., Semi-Centennial History of the Patrons of Husbandry, 1916; Buck, S. J., The Granger Movement, Harvard Historical Studies, vol. 19, 1913 (this book contains a comprehensive bibliography relative to this subject).

but a number of difficulties were soon encountered and failure resulted in many instances. This brought about a decline in the movement, so that by 1880 The Grange was practically extinct. Since then, however, it has been revived gradually, so that at present there are a large number of Granges in existence.

Other organizations of farmers were established about the same time as The Grange, or during its decline. Among the organizations which were established during this period were the National Farmers' Alliance and Industrial Union, the Northwestern National Farmers' Alliance, the National Agricultural Wheel, and the Brothers of Freedom.

PRESENT FORMS AND TENDENCIES.

The farmers' purchasing and marketing organizations of the present time may be divided into noncooperative capital stock companies and cooperative organizations. The term "noncooperative capital stock company" is used because an organization may be formed with capital stock and still be cooperative. The noncooperative capital stock company is an organization which distributes its profits according to the capital invested, by means of dividends on capital stock. In a company of this kind there is no limit to the proportion of the capital stock one person may own and the stockholders have as many votes as the number of shares they hold. This makes the capital stock the ruling factor in the organization. In a truly cooperative organization the financial interest of each member is limited, each member has the same voting power, and the savings [1] are distributed by paying a fair rate of interest on the capital invested, and by distributing any further savings in the form of a patronage dividend, proportioned on the amount of business transacted with the organization. Many of the truly cooperative organizations of this country are formed on the capital stock plan, but unlike the ordinary capital stock company there is a limit to the number of shares each may own, the voting powers of all the members are the same, and the stock dividend is limited to a fair rate of interest. Nonstock organizations needing capital usually charge a membership fee or else borrow the necessary money.

It is important to distinguish between stock and nonstock forms of organization because of the bearing which section 6 of the Clayton Act, amending the United States antitrust laws, has on this point.[2]

It is unfortunate that so many of our farmers' organizations are not formed on a strictly cooperative basis, as this fact undoubtedly has hindered the growth and development of the work of such associations. Among the reasons that can be given for the present

[1] In a strictly cooperative organization the gains made in the business are referred to as savings rather than profits.

[2] See page 77.

condition of affairs is the fact that only within the last few years have the laws of the various States made specific provision for the organization of truly cooperative associations, and even at the present time a large number of States do not have special laws for this purpose. The present cooperative laws of some of the States are so general in nature that organizations formed in accordance with them do not necessarily embody the underlying principles of cooperation. Therefore a large number of farmers' organizations have been formed under general corporation laws. Many organizations that have been formed under general corporation laws might be reorganized under cooperative laws, where such laws have been passed, with benefit to the members.

Among the general public there is not a clear conception of the differences between the cooperative and noncooperative forms of organization, with the result that noncooperative organizations frequently are called cooperative. Many of these associations have been started by a few persons and are operated for their profit. In support of the practice of paying large stock dividends it usually is stated that, since the stockholders are the ones who are taking the risk and will have to stand any losses that may be encountered, they are entitled to all the profits. Organizations which set aside an adequate reserve to cover any reverses that are likely to be encountered, protect its stockholders. Such organizations are in a position to distribute the profits on a patronage basis after paying the stockholders a stock dividend that represents a fair rate of interest on the money invested. In a noncooperative capital-stock company there is always danger of the ownership of capital stock becoming centered in one or a few individuals. The men in control may not be farmers, or if they are, they may retire from business or move to some other locality, with the result that the men who patronize the organization have no hand in its management.

The incentive to buy up a large amount of the capital stock is removed by limiting the stock dividend to a fair rate of interest on capital invested, while the limitation of the number of shares a member may own effectively provides against the possibility of the stock coming into the hands of a few. Some organizations also place restrictions on the transfer of stock in order to keep the shares in the possession of patrons of the association.

The separation of farmers' organizations in the United States into cooperative and noncooperative groups is by no means a simple task. Some authorities on cooperation insist that an organization must meet all the requirements laid down for cooperative organizations before it can be classed as such; on the other hand, there are persons who class all farmers' organizations as cooperative. If the former method is followed, a large number of the farmers' organiza-

tions in the United States will be excluded from the cooperative class because they fail to live up to cooperative rules in every detail. After all, the main point to be considered is the extent to which the organization works for the benefit of the farmer. An organization may never declare a patronage dividend and still be of profit to all its patrons. A number of the grain elevators, organized on the capital-stock plan, may be cited as examples. They have paid out the profits in the form of stock dividends, yet in many cases have been of benefit to all the patrons because they have paid a higher price for the grain than the farmers had previously received.

The farmers of the United States have engaged in business along a number of different lines. Although the underlying reasons for organizing have been quite similar for the various lines of organization, the histories of their growth are different and present some very instructive facts.

ELEVATORS.

The growth of the farmers' elevator movement was very slow at first but it gradually gained in stability and prominence and began to attract more attention and to receive more favorable treatment from the commission men and railroads. Since 1900 a number of very successful farmers' elevators have been established in the grain-growing States of the Middle West. As they became firmly established they began to assume a wider range of activity than that of handling grain. In some sections it is usual for elevators to ship live stock as well as grain, making a separate live-stock shipping association unnecessary.

Marked success also has been achieved by many farmers' elevators in handling such commodities as coal, lumber, brick, flour, feed, salt, twine, oils, and similar supplies needed by the farmers.

The cooperative elevators have frequently met with opposition from other dealers in these products. Nevertheless they have been able to carry these side lines with a resultant saving to the farmer.

Various estimates have been made of the amount saved by farmers' elevators, but it is difficult to arrive at any definite results because of the far-reaching effects of this form of organization. In many instances the farmers' elevators have increased the price paid the farmer for his grain; when side lines are carried there has often been an additional direct saving; and the dividends paid to the farmers by many of the elevators should also be considered. The increase in returns on products of the farm through the operation of these elevators has had a direct tendency to increase the value of the land in sections where such elevators are located.

Practically all of the important Middle West grain States now have State associations of farmers' elevators. These State associations make it possible for the local companies to keep in touch with one

another and form an effective means of promoting the interests of the farmers' companies. A number of the State associations have formed the National Council of Farmers' Cooperative Associations. This organization is the representative of the farmers' elevator companies in matters of interstate and national importance.

One unfortunate feature of the organization of the farmers' elevator companies is that so many of them fail to live up to cooperative principles. At first the organization of a farmers' elevator was considered a hazardous undertaking and it was asserted that the people who put money into such an undertaking ought to receive its profits in accordance with the amount of their investment. Now that the farmers' elevators are well established, all such organizations that are not cooperative should, wherever possible, adopt the cooperative plan of organization. Some elevators were organized with the assistance of local business men who subscribed for shares of stock, and many of them have experienced difficulty in reorganizing, because the members who are not farmers oppose such a move, as it would reduce the size of their dividends. Some of the farmer members also make this objection. These members should be made to see that the profit has been produced by the handling of the grain and should be distributed accordingly, allowing the stockholders only a fair rate of interest on their investment, if their organization is to be truly cooperative.

CREAMERIES AND CHEESE FACTORIES.

There are approximately 5,500 creameries and 3,500 cheese factories in the United States at the present time. The greater number are located in the territory east of the western boundary of Minnesota and Iowa. The organization of factories for making cheese dates from about the middle of the last century; creameries for the manufacture of butter were started a few years later. The early factories were usually cooperative in form. A number of cooperative creameries were established in New England, in New York, and the surrounding States. Creameries and cheese factories were not established in the North Central States until later, when the country became settled and there was a general change from a system of grain farming to that of diversified crop production. The first cooperative creamery in Minnesota was established in 1889. At the present time there are over 600 enterprises of this kind in that State.

The cooperative creamery has not encountered as well-organized opposition as that which the farmers' elevators have met. At first all creameries were local in character so that competition came principally from privately owned local plants. Since the advent of the hand separator large centralizing plants which receive shipments of cream from an extensive territory have been established. In

some localities these plants have been able to compete successfully with the farmers' organizations, with the result that some cooperative creameries have been forced to discontinue operations.

While the farmers' creameries have not had as systematic competition as the farmers' elevators, there have been other handicaps to their success. In some cases factories have been established before the supply of raw material was large enough to make their operation economical. The farmers have in some instances been the victims of professional promoters. The benefits of a creamery to a community were set forth in such a way that the farmers were led to expect success when it was impossible. Often the promoters received a contract for the creamery equipment for which the farmers paid an exorbitant price. Many creameries have been established in this manner in communities where the number of cows was far too small to make their operation profitable. When such conditions have existed it is not surprising that the cooperative spirit in some of these communities has waned, and that many of the plants which were established have failed.

The farmers' creameries as a general rule are operated in accordance with cooperative principles to a greater extent than are the farmers' elevators. This is accounted for by the differences in the two lines of business. In the grain business the production is seasonal and the market is fluctuating; the farmers also are accustomed to receive their money at the time of delivery of the grain. The production of dairy products is not as seasonal as grain production, and the changes in the market are usually less evident. Patrons of creameries in many places are accustomed to receiving the money for milk or cream once a month. It is therefore a common practice among cooperative creameries to deduct the expenses of operation, set aside whatever is needed as a reserve, and divide the net proceeds of the business among the patrons each month in accordance with the amount of butter fat delivered by each. Many of the farmers' creameries, therefore, are truly cooperative in every sense of the word. Some cooperative creameries set aside a sufficient amount to pay interest on capital invested, while others pay no interest on the capital. Many of the creameries are nonstock organizations; the necessary capital for building and equipping the plant is borrowed, and the money is paid back by a small monthly assessment on the business transacted. In a few cases a creamery has retired its capital stock by purchasing it from the holders with the surplus funds obtained by levying a small monthly assessment on the raw material delivered to the factory.

Not all the farmers' creameries are as near a strictly cooperative type as those described. Some farmers' creameries pay cash for the raw material as it is delivered. Such plants are not able to operate

on a strictly nonprofit basis, as it is necessary for them to buy the butter fat on a safe margin. The surplus funds thus obtained may be prorated quarterly or annually among the patrons, according to the amount of raw material each delivers; or it may be paid to the shareholders in the form of a dividend on capital stock. In some instances large stock dividends have been paid to creamery stockholders, but they are not nearly as common as they are among farmers' elevators.

Privately owned plants generally pay for the milk and cream as it is delivered. This practice has made it necessary for some cooperative creameries to do likewise, especially in districts where the cooperative spirit is not strongly developed and the farmers are not accustomed to the cooperative method of distributing the net returns monthly.

A few creameries have undertaken the marketing of eggs. In such cases an effort usually is made to supply only high-class trade. In order to guarantee the eggs, they are graded and each patron is held responsible for the quality. As the eggs are sold on a quality basis it is possible to obtain higher prices than would be received by the farmers for ordinary ungraded eggs of varying quality.

At a few cooperative creameries a cooperative laundry is operated in connection with the creamery. The creamery patrons may bring their family washing at the same time that they deliver the milk or cream, and as the work is done at cost the expense is not prohibitive.

The activities of the farmers' creameries and cheese factories for the most part have been local in character. A few cooperative dairy organizations have been formed to market the output of a number of creameries and cheese factories, but as yet this movement has not become very general. Butter makers, cheese makers, creamery officials, and dairymen have formed a number of State and National associations, which compare with similar associations among operators of elevators. These organizations are primarily for educational and protective purposes and also form a medium for holding contests and exhibits of the various dairy products.

STORES.

The cooperative store is an older form of organization than either the farmers' elevator or the creamery. A number of such stores were in existence about the middle of the last century, especially in the New England States. The Lowell Cooperative Association, which was established in 1876, is an example of a store that has been in operation for a long period. The seventy-seventh semiannual report of this store for the six months' period ending June 30, 1914, shows the distribution of about $5,000 as patronage dividends, indicating that the organization is cooperative.

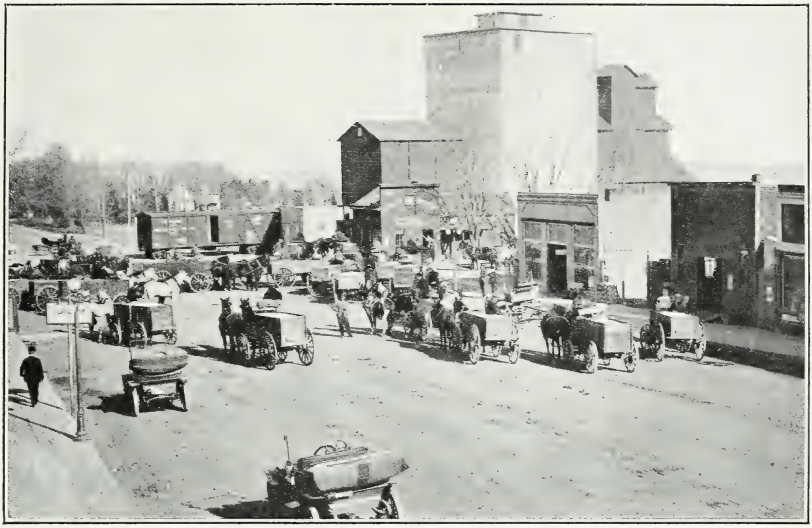


FIG. 1.—A BUSY DAY—FARMERS' GRAIN ELEVATOR.

FIG. 2.—SHIPPING DAY—FARMERS' LIVE STOCK SHIPPING ASSOCIATION.

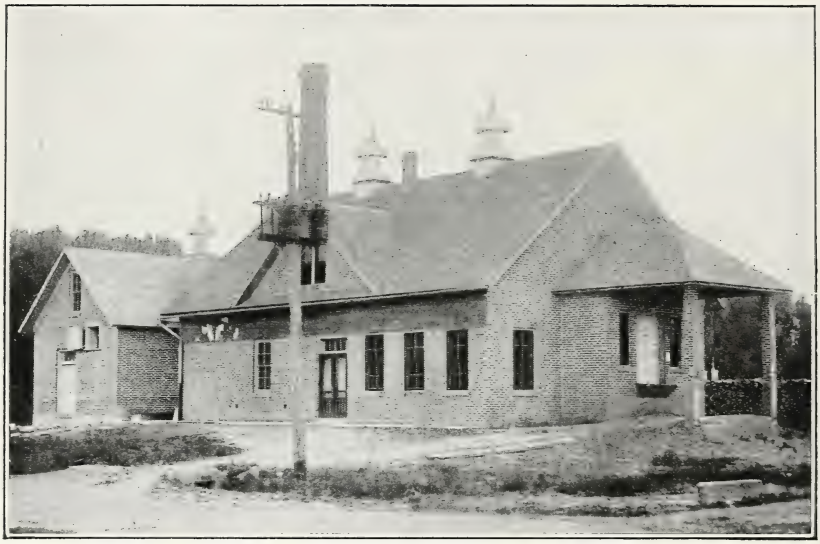


FIG. 1.—FARMERS' COOPERATIVE CREAMERY AND CHEESE FACTORY.

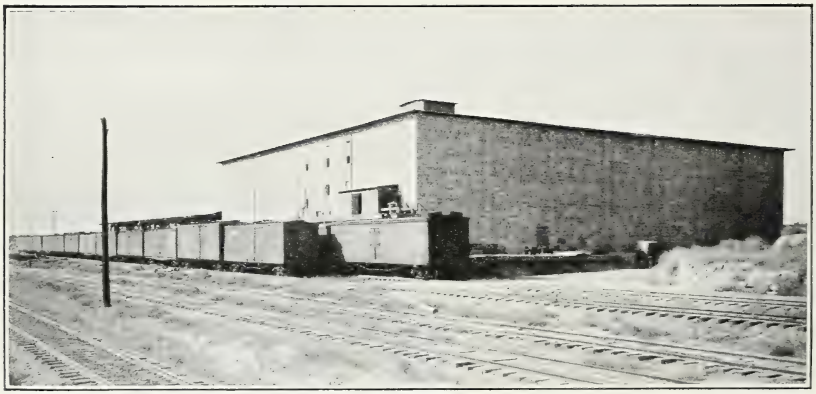


FIG. 2.—COLD-STORAGE PLANT—COOPERATIVE FRUIT MARKETING ASSOCIATION.

For various reasons a large number of failures have occurred among the farmers' cooperative stores. This line of business is not as well understood by the farmer as is the elevator or creamery business and he frequently fails to take into consideration the problems connected with the management of a store. The member of a creamery or an elevator association is in a better position to keep in touch with the business, while the members of a cooperative store association usually leave the supervision of its affairs entirely in the hands of the manager. Although this is a satisfactory arrangement in some cases, the manager is not always capable, and in some cases the store has even suffered through willful mismanagement. Another factor which sometimes causes failure is the fact that the farmers have been led to expect greater returns than it is possible to secure, so that the members are disappointed with the results obtained and cease to support the enterprise.

The failure of some cooperative stores is accounted for by the fact that they have not been operated in accordance with the underlying principles of cooperation. The English stores, based on the Rochdale plan of organization, are often cited as examples of successful cooperative stores. These stores embody the true principles of cooperation in that the voting power and financial interests of the members are limited, and the profits are distributed according to patronage.

FRUIT AND PRODUCE ASSOCIATIONS.

The method of marketing the fruit crop is very complex because of the perishability of the commodities handled and because a large proportion of the fruit is produced in certain restricted localities from which it must be distributed to all parts of the United States and foreign countries. The fruit growers of the United States have been attracted by the possibilities of cooperative fruit marketing, and during the last 25 years a large number of associations have been formed which have been very successful.

The most successful fruit-marketing associations are found in the Pacific Coast States, among the citrus fruit growers of California and the apple growers of the North Pacific States. These organizations owe a large part of their success to the fact that they do more than merely attend to the actual selling of the fruit. The fruit crop varies in quality; therefore the associations have assisted in standardizing the growing of the fruit, and in many instances have taken charge of the sorting and packing. Thus a large quantity of fruit of the same grade and quality is assured, and it is possible to establish trade-marked brands which become known to the trade. By conducting advertising campaigns on an extensive scale consumers are reached in large numbers, the consumption of the fruit is increased, a demand is insured, and brands are established on the market. A single grower

or even a number of growers can not accomplish very much in this manner, but when a number of local organizations of growers form a central organization, the volume of business is sufficiently large to render it practicable to conduct such work on an extensive scale. The local fruit-marketing associations have had greater need for central organizations than the local elevator and creamery associations, consequently such organizations have played a more important part in the case of fruit associations.

While the most extensive organizations for the marketing of fruit are found in the Western States, there are a number of such associations in other parts of the United States. Most of them are found in regions where fruit growing is an important industry, but some are found in places where this industry is only a side line. Fruit-marketing organizations formed in regions where the members are not dependent on the fruit crop for a living frequently are not very successful.

In some of the truck-growing districts there are extensive organizations for the marketing of truck crops. Like some of the fruit associations, they have been instrumental in establishing uniform grades and in selling them under trade-marked brands. In addition, a number of local organizations formed for the purpose of marketing truck or vegetable crops are scattered over the country. A number of such associations have been organized for the sole purpose of marketing potatoes, while others which began with potatoes now handle a variety of commodities.

COTTON ORGANIZATIONS.

The cotton growers of the South have a number of cooperative organizations, but the cotton grower is not as well organized as the fruit grower, the grain farmer, or the dairy farmer. Because of the common custom of securing advances on their growing crop from merchants and others, the marketing of the cotton crop, to a large extent, has been taken out of the farmers' hands. This practice has stood in the way of any extensive organization among the growers for marketing purposes. While the movement is not yet general, there are a number of selling associations, warehouses, cotton gins, and oil mills that are controlled by growers.

COOPERATIVE PURCHASING.

The cooperative purchase of supplies has been carried on among the farmers of the United States for a long time. In some cases the farmers have associations organized for this special purpose, but in a great number of instances it is carried on in an informal way, without a definite organization. The selling associations of farmers frequently serve as mediums for the cooperative purchase of supplies. Thus the fruit associations often buy supplies needed by the fruit growers, and the same custom is followed by other cooperative organizations.

STATISTICS OF COOPERATION.

METHOD USED IN SECURING INFORMATION.

In January, 1914, the Office of Markets and Rural Organization undertook a survey of cooperative marketing in the United States. The first step necessary in a study of this kind was to secure a list of the names of the cooperative marketing organizations of the United States. A nucleus for such a list was secured from the mailing list of the department and to this were added names received from various other sources. Through the Bureau of Crop Estimates of the Department of Agriculture a letter was sent to the voluntary crop correspondents scattered throughout the United States. This letter requested the correspondent to furnish the department with the names and addresses of all the cooperative marketing organizations in his territory. Through the States Relations Service of the department additional names were secured from the county agents. In addition, some of the agricultural colleges, secretaries of state, and State departments of agriculture furnished such lists of organizations in their States as were available. From these various sources approximately 12,500 names of farmers' purchasing and marketing organizations were secured.

Questionnaires which called for information relating to the plan of organization, the number of members, the kind and volume of business, the method of distributing profits, and other items were sent to the organizations on the list compiled by the Department of Agriculture. Many were returned with the information that the organizations had discontinued business. On account of inaccuracies in the names of some of the organizations reported, there were some duplicates on the list. In some instances the names proved to be those of private concerns, not farmers' or cooperative organizations in any sense. These corrections reduced the number on the list to about 12,300. In all, 5,424 organizations have been included in the final summations (see Table I). This means that more than 6,000 organizations have failed to report. It is believed that many of these are not actively engaged in business, because they have failed to reply to repeated requests for information. It is also probable that some of this number failed to reply because they are private concerns and therefore do not come within the scope of this survey.

All of the strictly private concerns and the stock companies in which a few stockholders appear to operate the business principally for their own benefit have been eliminated, in order to make the survey include as nearly as possible only farmers' cooperative marketing organizations. While no hard and fast rules of classification have been laid down, an attempt has been made to include all of those organizations which are composed of a number of farmers and are operated primarily for the benefit of the patrons. While a number of these organizations would not be classed as cooperative under

a strict interpretation of the definition of cooperation, it has been thought best to include all of those in which the benefits of the business to some extent accrue to the farmer patrons, which benefits would not have been secured from a private company, owned and operated for the sole purpose of making money in the business.

There are undoubtedly a number of organizations whose names and addresses have not yet been secured, and probably some of those that failed to reply are actively engaged in business; consequently this survey does not cover all of the organizations. It is believed, however, that those included represent most of the going concerns, and that the information secured is fairly complete. Many cooperative associations reach the point of organization only, as is shown by the large number of letters received by the Department of Agriculture from farmers, stating that an association had been formed in their community, but as yet had failed to do business to any considerable extent.

DESCRIPTION OF TABLES.

The information secured from the survey has been summarized and is presented in Tables I to III, inclusive. In Table I the total number of farmers' organizations reporting to the Office of Markets and Rural Organization, for each class of business, is shown by States as well as for the United States as a whole. (See also Charts 2 and 3.) The column headed "Grain elevators and warehouses" includes the grain warehouses common in the North Pacific States as well as the regular grain elevators. Creameries and cheese factories have been grouped together because in a number of instances one plant makes both butter and cheese. As many associations handle both fruit and produce, these two forms have been grouped in the same manner. The miscellaneous class includes the enterprises that could not be grouped in any of the other classes. Of the 5,424 organizations included in this report, 1,637 are grain elevators and warehouses, 1,708 creameries and cheese factories, 871 fruit and produce, 213 cotton, 275 store, 43 tobacco, 96 live stock, and 581 miscellaneous associations.

TABLE I.—*Total number of farmers' organizations reporting for each class of business, by States.*

State.	Total number reporting.	Kind of business.							
		Grain elevator and warehouse.	Creameries and cheese factories.	Fruit and produce.	Cotton.	Stores.	Tobacco.	Live stock.	Miscellaneous.
Alabama	51			26	19	1		1	4
Arizona	7			3	1				3
Arkansas	89		1	63	15	3			7
California	197		26	124	2	11			34
Colorado	53	3	13	28		1			8
Connecticut	20		14	3					3
Delaware	5		3	1					1
Florida	69			55	2				12
Georgia	55			5	44	2			4
Idaho	59	9	6	17		1			26
Illinois	263	192	34	11		2			24

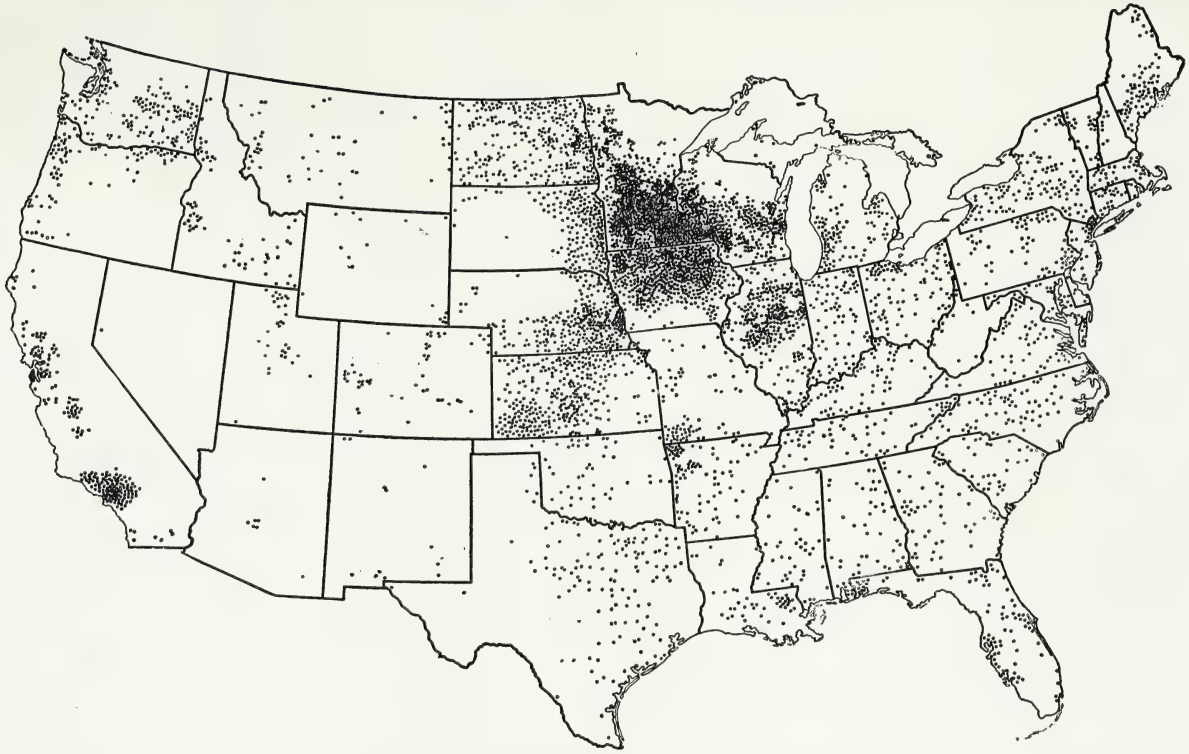
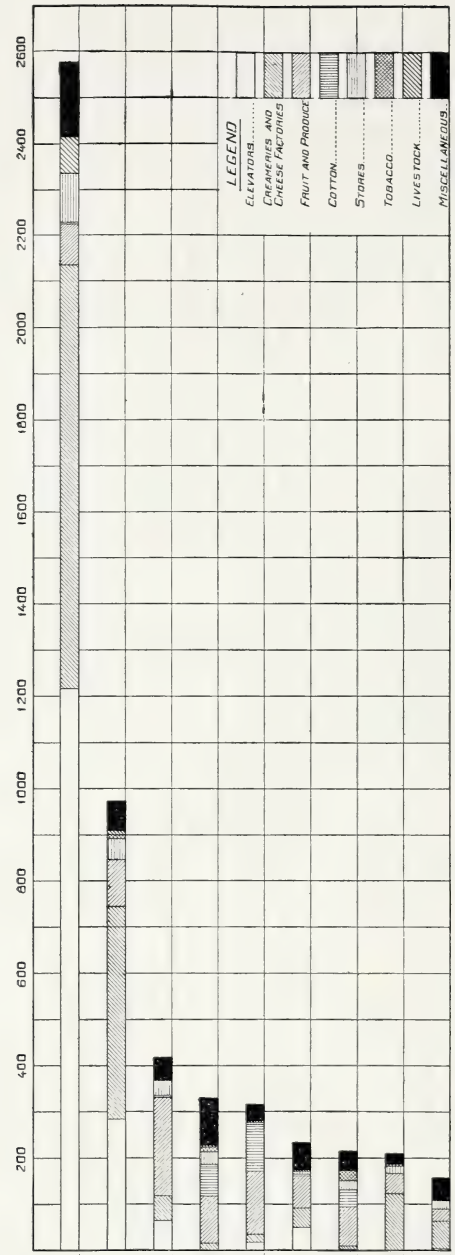
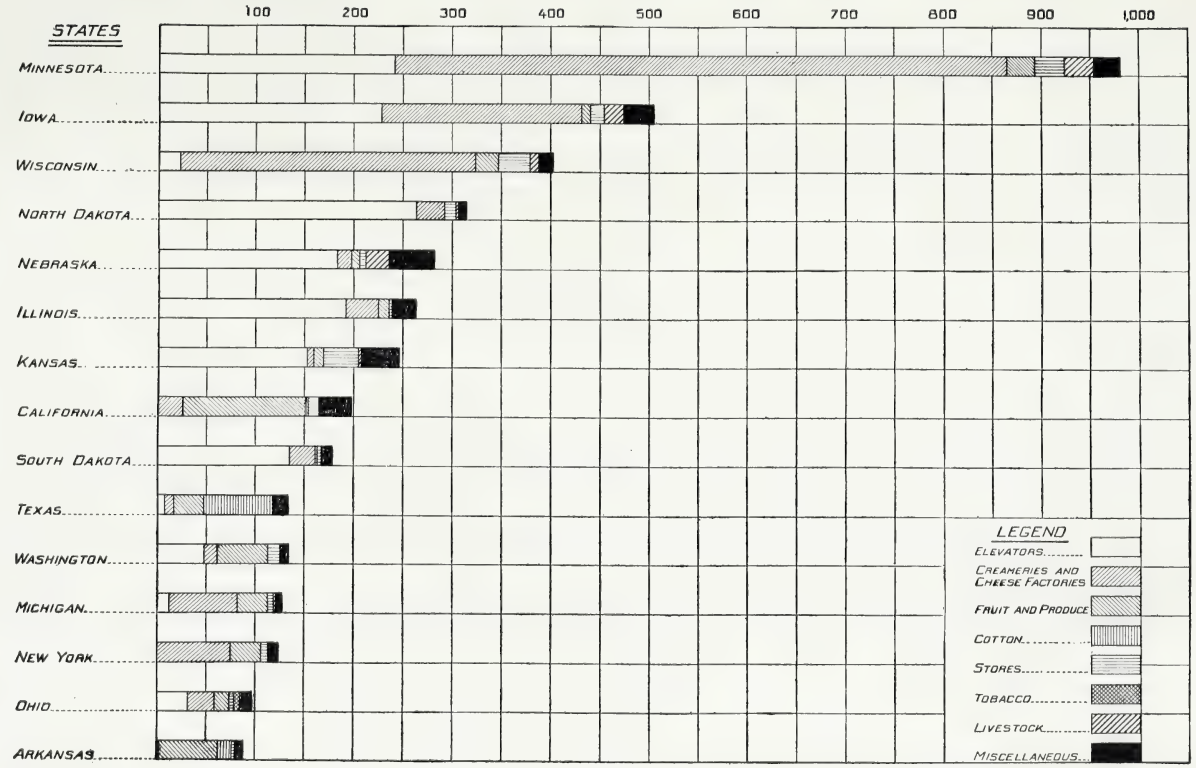


CHART 1.

LOCATION OF ALL COOPERATIVE ORGANIZATIONS REPORTING TO THE OFFICE OF MARKETS AND RURAL ORGANIZATION.



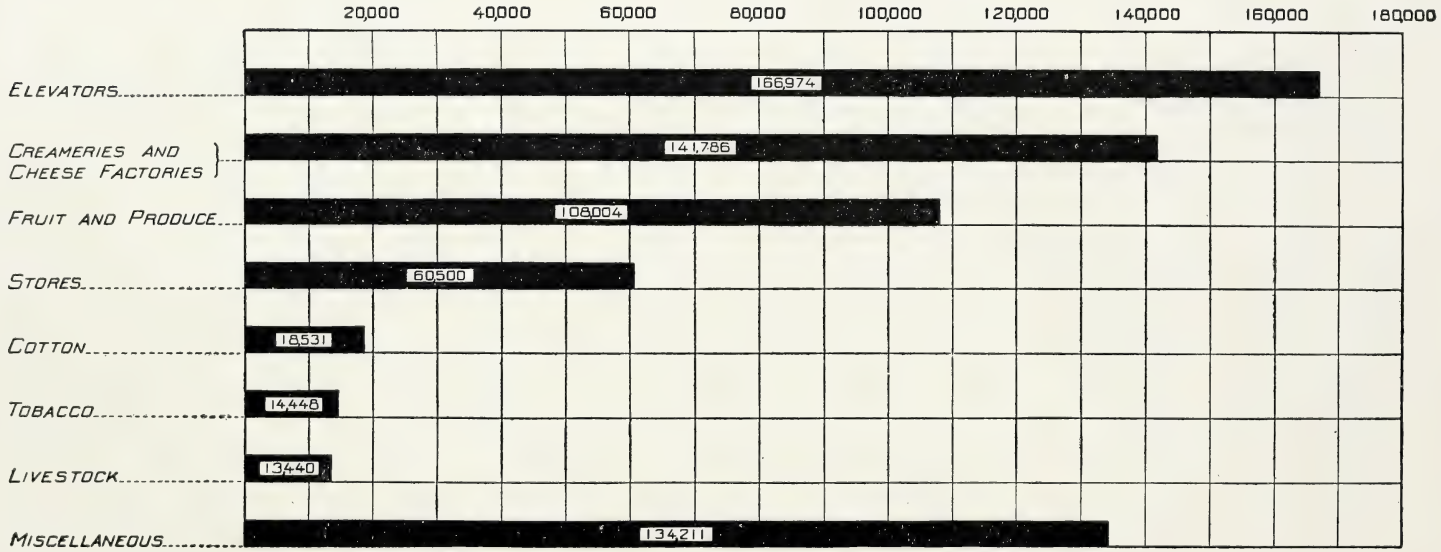
NUMBER OF COOPERATIVE ORGANIZATIONS BY CLASS IN GEOGRAPHICAL DIVISIONS.



NUMBER OF ORGANIZATIONS BY CLASS IN FIFTEEN LEADING COOPERATIVE STATES.

Bul. 547, U. S. Dept. of Agriculture.

CHART 3.



MEMBERSHIP OF ALL COOPERATIVE ORGANIZATIONS.

CHART 4.

TABLE I.—*Total number of farmers' organizations reporting for each class of business, by States*—Continued.

State.	Total number reporting.	Kind of business.							
		Grain elevator and warehouse.	Creameries and cheese factories.	Fruit and produce.	Cotton.	Stores.	Tobacco.	Live stock.	Miscellaneous.
Indiana	84	27	27	19	.....	.....	.....	.....	11
Iowa	505	228	204	8	.....	14	.....	20	31
Kansas	246	153	6	10	.....	36	.....	2	39
Kentucky	66	1	6	15	.....	6	21	.....	17
Louisiana	44	.....	.....	34	3	.....	.....	.....	7
Maine	71	1	7	19	.....	5	.....	.....	39
Maryland	19	.....	1	8	.....	.....	.....	.....	10
Massachusetts	31	.....	10	5	.....	11	.....	.....	5
Michigan	127	12	70	31	.....	7	.....	2	5
Minnesota	980	241	624	28	.....	30	.....	30	27
Mississippi	42	.....	.....	26	11	.....	1	.....	4
Missouri	73	13	15	34	1	6	.....	1	3
Montana	51	27	12	7	.....	2	.....	.....	3
Nebraska	282	183	15	7	.....	6	.....	25	46
Nevada	2	.....	1	.....	.....	.....	.....	.....	1
New Hampshire	8	.....	8	.....	.....	.....	.....	.....	.....
New Jersey	20	.....	2	9	.....	4	.....	.....	5
New Mexico	13	.....	.....	3	.....	.....	.....	.....	10
New York	124	.....	75	32	.....	7	.....	.....	10
North Carolina	74	.....	4	9	10	17	5	1	28
North Dakota	313	264	29	.....	.....	12	.....	2	6
Ohio	97	31	29	16	.....	4	7	1	9
Oklahoma	48	11	8	9	13	2	.....	2	3
Oregon	85	16	16	40	.....	8	.....	.....	5
Pennsylvania	66	.....	48	4	.....	4	2	.....	8
Rhode Island	4	.....	.....	.....	.....	3	.....	.....	1
South Carolina	37	.....	1	7	14	2	1	.....	12
South Dakota	178	135	26	1	.....	4	.....	.....	12
Tennessee	56	.....	2	18	7	13	1	.....	15
Texas	134	7	9	31	71	.....	.....	.....	16
Utah	31	4	9	12	.....	1	.....	.....	5
Vermont	23	.....	22	.....	.....	.....	.....	.....	1
Virginia	58	.....	8	13	.....	3	5	1	28
Washington	134	48	14	52	.....	12	.....	.....	8
West Virginia	12	.....	.....	4	.....	1	.....	.....	7
Wisconsin	402	23	301	24	.....	32	.....	7	15
Wyoming	16	8	2	.....	.....	2	.....	1	3
United States..	5,424	1,637	1,708	871	213	275	43	96	581

Table II shows the type of organization, the annual volume of business, and membership for the organizations reporting on these points, arranged according to classes for each State, with a similar arrangement for all classes for the entire United States. (See also Charts 4 and 8.) So far as possible, the type of organization has been indicated. Those that conduct their business as an ordinary stock company have been placed in one class and those that operate on a more truly cooperative basis have been placed in the other class. This does not mean that all the associations in the last-named class are organizations without capital stock; on the contrary, a large number of them have capital stock because this is the common form of organization among farmers' companies. An association can be truly cooperative even though it is formed on the stock-company plan. As has been stated, an effort was made to exclude all organizations owned and operated for the benefit of a few stockholders. Those with a large number of stockholders which appear to operate principally for the benefit of the patrons have been included, even though they are not strictly cooperative in nature.

TABLE II.—*Type of organization, volume of business, and number of members of organizations reporting, by States and kinds of business.*

State.	Type of organization.		Volume of business.								Membership.		
			1912		1913		1914		1915				
	Stock company.	Cooperative.	Number reporting	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Total.	Average.
Alabama:													
Fruit and produce		24	1	$42,624	10	$861,177	11	$1,265,900	3	$95,500	20	3,023	151
Cotton	11	6			4	4,802,000	7	5,284,300	1	1,500	9	1,177	131
Stores		1					1	100,000	1	120,000	1	15	15
Live stock		1											
Miscellaneous	1	3					1	20,000	1	20,000	3	365	122
Total	12	35	1	42,624	14	5,663,177	20	6,670,200	6	237,000	33	4,580	139
Average				42,624		404,513		333,510		39,500			
Arizona:													
Fruit and produce		2	1	40,000	1	45,000					3	220	73
Cotton					1	112,500	1	266,500					
Miscellaneous		3					1	50,000	1	60,000	3	535	178
Total		5	1	40,000	2	157,500	2	316,500	1	60,000	6	755	126
Average				40,000		78,750		158,250		60,000			
Arkansas:													
Creameries and cheese factories							1	1,500	1	1,800			
Fruit and produce	12	49			39	1,412,204	36	1,102,292	4	28,111	59	3,917	66
Cotton	7	8			4	536,348	11	618,493	4	3,700	9	438	49
Stores	1	2			1	4,000	1	4,000			3	422	141
Miscellaneous	2	4			2	71,952	3	86,000			5	227	45
Total	22	63			46	2,024,504	52	1,812,285	9	33,611	76	5,004	66
Average						44,011		34,852		3,768			
California:													
Creameries and cheese factories	16	8	1	160,000	19	4,313,791	16	3,705,083			18	1,313	73
Fruit and produce	62	59	52	24,537,166	64	20,709,498	31	11,756,078	3	2,835,816	109	13,877	127
Cotton	1	1					1	600,000			1	30	30
Stores	1	10			1	75,000	9	497,555			8	1,094	137
Miscellaneous	16	16	5	1,943,000	18	5,061,659	19	3,491,380	3	255,000	30	2,779	93
Total	96	94	58	26,640,166	102	30,159,948	76	20,050,096	6	3,090,816	166	19,093	115
Average				459,313		295,686		263,817		515,136			

Colorado:													
Elevators	1	2					2	375,000	1	250,000	2	450	225
Creameries and cheese factories	8	5			8	111,701	11	148,471	2	24,314	9	246	27
Fruit and produce	21	7	14	2,508,175	18	2,042,620	9	612,150	1	125,600	22	3,591	163
Stores		1					1	150,000			1	80	80
Miscellaneous	1	7	1	110,000	3	191,630	2	16,630			7	715	102
Total	31	22	15	2,618,175	29	2,345,951	25	1,302,251	4	399,314	41	5,082	124
Average				174,545		80,895		52,090		99,829			
Connecticut:													
Creameries and cheese factories	7	6	3	111,900	11	560,600	9	495,111	1	24,408	9	1,247	139
Fruit and produce		2			1	5,500	1	4,500			3	130	43
Miscellaneous	1	1	1	50,000	1	47,000					3	465	155
Total	8	9	4	161,900	13	613,100	10	499,611	1	24,408	15	1,842	123
Average				40,475		47,162		49,961		24,408			
Delaware:													
Creameries and cheese factories		1			2	40,075	2	44,309					
Fruit and produce			1	500,000	1	500,000					1	1,200	1,200
Miscellaneous	1				1	20,000	1	20,000			1	3	3
Total	1	1	1	500,000	4	560,075	3	64,309			2	1,203	602
Average				500,000		140,019		21,436					
Florida:													
Fruits and produce	3	46	1	90,000	25	1,682,200	27	1,988,200	5	82,500	50	2,053	41
Cotton	2										1	15	15
Miscellaneous	2	7			4	300,400	6	352,350			7	467	67
Total	7	53	1	90,000	29	1,982,600	33	2,340,550	5	82,500	58	2,535	44
Average				90,000		68,366		70,926		16,500			
Georgia:													
Fruit and produce	1	4	1	2,250,000	2	11,000	2	13,000	1	5,000	5	522	104
Cotton	31	9			14	1,952,800	12	1,901,660	1	3,000	25	1,873	75
Stores		2					1	45,000	1	48,000	2	100	50
Miscellaneous	2	1			3	64,000	3	62,000			3	231	77
Total	34	16	1	2,250,000	19	2,027,800	18	2,021,660	3	56,000	35	2,731	78
Average				2,250,000		106,726		112,315		18,667			
Idaho:													
Elevators	7	1	1	3,000	5	164,807	3	117,500			9	508	56
Creameries and cheese factories	1	5	1	4,000	2	57,000	4	148,000	1	150,000	6	902	150
Fruit and produce	5	12			9	458,000	7	275,760			15	1,188	79
Stores	1				1	5,000	1	10,000			1	27	27
Miscellaneous	7	15			11	1,433,400	17	2,142,831			24	12,038	502
Total	21	33	2	7,000	28	2,118,207	32	2,694,091	1	150,000	55	14,663	267
Average				3,500		75,650		84,190		150,000			

TABLE II.—*Type of organization, volume of business, and number of members of organizations reporting, by States and kinds of business*—Continued.

State.	Type of organization.		Volume of business.								Membership.		
			1912		1913		1914		1915				
	Stock company.	Cooperative.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Total.	Average.
Illinois:													
Elevators	171	20	23	$4,249,784	139	$24,605,105	126	$22,783,757	8	$1,305,000	172	17,873	104
Creameries and cheese factories	24	8	1	25,000	23	653,746	23	573,142	2	7,900	25	2,503	100
Fruit and produce	7	2	.....	.....	4	187,500	4	167,300	1	2,500	11	738	67
Stores	.....	2	.....	.....	.....	.....	2	124,000	.....	.....	2	587	294
Miscellaneous	9	13	3	27,000	8	250,000	6	222,000	.....	.....	19	5,058	266
Total	211	45	27	4,301,784	174	25,696,369	161	23,870,199	11	1,315,400	229	26,759	117
Average	.....	.....	.....	159,325	.....	147,680	.....	148,262	.....	119,582	.....	.....	.....
Indiana:													
Elevators	17	8	8	1,305,417	16	2,370,044	12	1,053,271	1	45,000	24	2,498	104
Creameries and cheese factories	16	9	8	151,586	21	658,558	15	605,800	2	110,000	19	856	45
Fruit and produce	10	8	.....	.....	10	385,500	12	258,600	1	2,500	18	474	26
Miscellaneous	7	3	.....	.....	2	24,000	5	134,400	1	54,000	9	675	75
Total	50	28	16	1,457,003	49	3,439,102	44	2,052,071	5	211,500	70	4,503	64
Average	.....	.....	.....	91,063	.....	70,165	.....	46,638	.....	42,300	.....	.....	.....
Iowa:													
Elevators	104	106	56	8,865,248	158	23,650,965	111	16,389,706	1	408,700	209	24,937	119
Creameries and cheese factories	35	159	63	3,806,578	161	8,527,224	117	5,431,843	17	863,486	176	18,985	108
Fruit and produce	2	5	2	62,000	4	142,542	4	93,259	1	4,000	6	476	79
Stores	5	7	2	104,000	7	593,090	8	377,567	.....	.....	12	1,843	154
Live stock	3	11	10	1,895,956	15	2,707,453	3	338,000	.....	.....	17	2,193	129
Miscellaneous	17	12	8	1,185,417	26	2,799,534	18	2,049,028	.....	.....	29	4,324	149
Total	166	300	141	15,919,199	371	38,420,808	261	24,679,403	19	1,276,186	449	52,758	118
Average	.....	.....	.....	112,902	.....	103,560	.....	94,557	.....	67,168	.....	.....	.....
Kansas:													
Elevators	104	45	38	6,005,714	82	9,271,785	77	15,266,248	16	2,891,000	140	12,957	93
Creameries and cheese factories	2	4	.....	.....	4	37,539	6	60,709	1	10,533	6	300	50
Fruit and produce	2	7	1	30,000	7	325,282	8	426,296	1	200,000	10	1,373	137
Stores	7	26	1	175,000	17	756,580	23	1,454,663	7	230,000	32	6,563	205

Live stock	1		1	111,282	2	171,282	1	27,000			2	370	185
Miscellaneous	15	26	1	320,000	16	3,331,203	24	4,129,353	7	348,500	31	4,144	134
Total	131	108	42	6,641,996	128	13,893,671	139	21,364,329	32	3,680,033	221	25,707	116
Average				158,143		108,544		153,700		115,001			
Kentucky:													
Elevators	1				1	100,000	1	125,000			1	85	85
Creameries and cheese factories	4	1	3	33,200	4	43,200	1	8,000			3	188	63
Fruit and produce	7	7			7	401,700	9	272,264	2	2,550	13	1,023	79
Stores	4	2			4	76,000	4	92,000			5	917	183
Tobacco	17	2			10	1,580,489	9	1,718,103	1	150,000	11	7,345	668
Miscellaneous	5	11			8	293,090	8	291,000	1	4,000	13	2,060	158
Total	38	23	3	33,200	34	2,494,479	32	2,506,367	4	156,550	46	11,618	253
Average				11,067		73,367		78,324		39,138			
Louisiana:													
Fruit and produce	11	21	3	426,979	16	482,683	15	254,726	6	287,150	32	3,201	100
Cotton	2	1			1	50,000	2	60,000			1	5	5
Miscellaneous	6	1	1	75,000	5	292,000	3	118,000			7	748	107
Total	19	23	4	501,979	22	824,683	20	432,726	6	287,150	40	3,954	99
Average				125,495		37,486		21,636		47,858			
Maine:													
Elevators	1												
Creameries and cheese factories	2	4	1	51,000	2	2,059,545	4	2,196,151	2	140,000	3	244	81
Fruit and produce	13	6	2	123,000	8	216,800	6	34,170	2	5,000	19	1,203	63
Stores	1	4			1	26,000	3	84,000	2	78,000	3	681	227
Miscellaneous	34	5	2	29,000	15	816,137	18	1,532,870			38	4,911	130
Total	51	19	5	203,000	26	3,118,482	31	3,847,191	6	223,000	63	7,039	112
Average				40,600		119,942		124,103		37,167			
Maryland:													
Creameries and cheese factories		1			1	5,000	1	5,000			1	54	54
Fruit and produce	6	2	1	1,250,000	3	1,289,559	4	80,304	1	5,000	8	1,014	127
Miscellaneous	4	5			3	194,000	3	203,000	1	30,000	10	691	69
Total	10	8	1	1,250,000	7	1,488,559	8	288,304	2	35,000	19	1,759	93
Average				1,250,000		212,651		36,038		17,500			
Massachusetts:													
Creameries and cheese factories	5	4	2	51,470	7	256,202	4	70,000			8	657	82
Fruit and produce	1	3	1	968,000	3	1,210,603	1	3,000			5	693	139
Stores	4	6			6	404,795	8	579,223	3	172,847	10	4,515	452
Miscellaneous	2	2			2	50,000	4	159,000			4	134	34
Total	12	15	3	1,019,470	18	1,921,600	17	811,223	3	172,847	27	5,999	222
Average				339,823		106,756		47,719		57,616			

TABLE II.—*Type of organization, volume of business, and number of members of organizations reporting, by States and kinds of business*—Continued.

State.	Type of organization.		Volume of business.								Membership.		
			1912		1913		1914		1915				
	Stock company.	Cooperative.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Total.	Average.
Michigan:													
Elevators	7	4			6	$1,002,700	7	$1,243,700	1	$150,000	8	1,582	176
Creameries and cheese factories	32	35	11	$404,400	55	2,345,155	45	2,087,642	6	316,125	64	7,320	114
Fruit and produce	15	14	1	12,000	17	718,604	14	1,106,269	1	150,000	28	4,697	168
Stores	1	5	1	179,200	1	672,647	6	1,079,025			4	2,864	716
Live stock	1				1	77,879	2	150,000			2	210	105
Miscellaneous	4	1	1	50,000	2	260,002	1	210,000	1	125	5	638	128
Total	60	59	14	645,600	82	5,076,987	75	5,876,636	9	616,250	112	17,311	155
Average				46,114		61,914		78,355		68,472			
Minnesota:													
Elevators	125	94	36	3,943,425	150	16,293,064	149	16,893,541	31	3,607,053	212	26,325	125
Creameries and cheese factories	77	537	142	5,984,327	437	20,393,399	318	12,074,275	80	3,341,120	556	42,783	77
Fruit and produce	5	18	10	343,599	13	453,357	10	155,678	1	40,000	24	1,801	75
Stores	6	19	12	402,100	14	715,763	18	898,250	2	80,000	27	2,784	103
Live stock		25	1	111,656	12	951,960	22	1,748,449	3	129,000	25	3,683	147
Miscellaneous	8	16	7	722,632	22	1,318,352	12	575,122			25	2,426	97
Total	221	709	208	11,507,739	648	40,125,895	529	32,345,315	117	7,197,173	869	79,802	92
Average				55,326		61,923		61,144		61,514			
Mississippi:													
Fruit and produce	1	24			13	170,440	13	264,786	1	1,500	26	1,688	65
Cotton	11				7	659,100	9	225,005	4	45,350	8	205	26
Tobacco		1									1	80	80
Miscellaneous	1	3			2	66,670	9	67,000			3	225	75
Total	13	28			22	896,210	31	556,791	5	46,850	38	2,198	58
Average						40,737		17,961		9,370			
Missouri:													
Elevators	13				4	224,821	8	597,909	2	80,000	13	1,489	115
Creameries and cheese factories	9	6	3	151,830	11	498,317	10	554,900	1	7,000	11	470	43
Fruit and produce	5	26	1	50,000	26	1,191,282	23	1,048,607	2	20,300	32	3,262	102

Cotton	1				1	65,000	1	35,000			1	14	14
Stores	5	1			2	27,000	5	139,800	2	22,500	5	340	68
Live stock	1						1	2,000					
Miscellaneous	2	1			1	17,000	3	28,551			3	568	189
Total	36	34	4	201,830	45	2,023,420	51	2,406,767	7	129,800	65	6,143	94
Average				50,458		44,965		47,192		18,543			
Montana:													
Elevators	12	14	2	175,000	8	1,485,099	13	2,448,822	5	735,000	23	2,413	105
Creameries and cheese factories	8	5			8	410,736	6	721,732			7	663	95
Fruit and produce	2	4	1	12,000	4	66,900	3	39,000	1	10,000	6	489	82
Stores	1	1			1	26,000	1	50,000			2	123	62
Miscellaneous	1	1			2	236,000	2	245,000			2	73	37
Total	24	25	3	187,000	23	2,224,735	25	3,504,554	6	745,000	40	3,761	94
Average				62,333		96,728		140,182		124,167			
Nebraska:													
Elevators	137	44	26	5,647,736	83	11,195,185	105	14,440,269	19	425,000	173	17,157	99
Creameries and cheese factories	6	9	1	36,868	6	550,000	7	632,918			11	1,227	111
Fruit and produce	3	4	1	14,060	6	33,852	6	388,002			6	701	117
Stores	4	2	1	36,000	1	36,000	1	2,000	1	30,000	4	463	116
Live stock	8	15	2	116,163	9	746,222	14	1,201,559	4	360,000	24	3,817	159
Miscellaneous	21	21	2	229,276	17	1,816,410	27	3,398,245	4	655,000	37	3,293	89
Total	179	95	33	6,080,103	122	14,677,669	160	20,062,993	28	1,470,000	255	26,658	105
Average				184,246		120,309		125,394		52,500			
Nevada:													
Creameries and cheese factories		1			1	7,850	1	8,000					
Miscellaneous		1									1	1,265	
Total		2			1	7,850	1	8,000			1	1,265	1,265
Average						7,850		8,000					
New Hampshire:													
Creameries and cheese factories	2	6			5	121,158	5	121,146	2	35,000	5	1,186	239
Average						24,231		24,229		17,500			
New Jersey:													
Creameries and cheese factories	1	1			2	585,274	2	687,150			2	52	26
Fruit and produce	5	2	2	1,403,000	3	1,449,400	4	1,175,956	1	2,500	8	3,585	448
Stores	1	2			2	120,000	2	146,154	1	11,154	4	1,001	250
Miscellaneous	1	3			1	500					3	1,352	451
Total	8	8	2	1,403,000	8	2,155,174	8	2,009,260	2	13,654	17	5,990	352
Average				701,500		269,397		251,158		6,827			

TABLE II.—*Type of organization, volume of business, and number of members of organizations reporting, by States and kinds of business*—Continued.

State.	Type of organization.		Volume of business.								Membership.		
			1912		1913		1914		1915				
	Stock company.	Cooperative.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Total.	Average.
New Mexico:													
Fruit and produce	2				2	$37,500	3	$136,251	1	$100,000	3	120	40
Miscellaneous	5	5	3	$287,278	4	413,967	3	286,500			8	608	76
Total	7	5	3	287,278	6	451,467	6	422,751	1	100,000	11	728	66
Average				95,759		75,241		70,458		100,000			
New York:													
Creameries and cheese factories	33	33	10	518,615	45	2,059,166	47	1,934,365	7	182,846	57	2,779	49
Fruit and produce	11	15	5	4,435,219	18	9,244,842	14	2,769,014	1	1,500,000	24	3,640	152
Stores	3	2	1	22,000	5	209,489	5	229,409			6	904	151
Miscellaneous	2	7	1	5,000	3	66,500	5	308,576	1	150,000	9	834	93
Total	49	57	17	4,980,834	71	11,579,997	71	5,241,364	9	1,832,846	96	8,157	85
Average				292,990		163,099		73,822		203,650			
North Carolina:													
Creameries and cheese factories	1	3	1	100,000	1	23,000	1	120,000	1	240,000	4	645	161
Fruit and produce	2	7			7	109,500	6	154,000			8	1,920	240
Cotton	7	1	1	15,000	6	3,727,000	4	4,620,000			5	677	135
Stores	11	5	2	57,000	11	263,384	9	336,400			15	1,551	103
Tobacco	3	1			1	725,000	1	725,000			4	1,696	424
Live stock		1									1	50	50
Miscellaneous	3	19	2	25,000	14	147,848	12	94,200	1	1,200	22	1,486	68
Total	27	37	6	197,000	40	4,995,732	33	6,049,600	2	241,200	59	8,025	136
Average				32,833		124,893		183,321		120,600			
North Dakota:													
Elevators	162	98	70	10,955,090	138	19,616,065	120	15,904,434	58	10,034,157	234	17,397	74
Creameries and cheese factories	15	16	5	181,809	16	322,027	16	234,264	3	37,000	20	948	47
Stores	10	2	1	36,000	4	112,085	4	86,112	1	40,000	7	519	74
Live stock		2					1	13,288	2	75,000	2	186	93
Miscellaneous	5	1			4	71,857	4	670,000	2	225,000	4	320	80
Total	192	119	76	11,172,899	162	20,122,034	145	16,908,098	66	10,411,157	267	19,370	73
Average				147,012		124,210		116,608		157,745			

Ohio:													
Elevators	29	.....	5	370,371	16	1,829,701	13	1,545,500	4	300,000	28	2,977	106
Creameries and cheese factories	21	6	4	82,609	23	811,772	22	2,003,317	1	25,000	25	5,709	228
Fruit and produce	7	9	1	45,000	9	909,827	8	935,827	1	80,000	14	879	63
Stores	1	3	.....	.....	1	155,000	1	180,000	.....	.....	4	1,010	253
Tobacco	7	.....	.....	.....	7	249,931	3	250,576	.....	.....	7	551	79
Live stock	.....	1	.....	.....	1	3,275	1	9,500	.....	.....	1	90	90
Miscellaneous	1	5	1	4,352	4	17,000	8	78,200	2	26,487	6	1,203	201
Total	66	24	11	502,332	61	3,976,506	56	5,002,920	8	431,487	85	12,419	146
Average	.....	.....	.....	45,667	.....	65,189	.....	89,338	.....	53,936	.....	.....	.....
Oklahoma:													
Elevators	8	2	2	129,330	8	631,000	7	997,000	3	490,000	9	794	88
Creameries and cheese factories	4	4	1	16,000	3	66,573	4	108,317	2	40,759	6	485	81
Fruit and produce	2	6	.....	.....	2	19,000	3	48,000	2	4,500	7	313	45
Cotton	12	1	.....	.....	8	419,757	9	577,558	2	42,500	11	688	63
Stores	2	.....	1	110,000	.....	.....	1	15,870	.....	.....	2	601	301
Live stock	2	.....	.....	.....	1	55,000	1	150,000	.....	.....	2	138	69
Miscellaneous	1	2	.....	.....	.....	.....	1	63,000	1	14	2	61	31
Total	31	15	4	255,330	22	1,191,330	26	1,959,745	10	577,773	39	3,080	79
Average	.....	.....	.....	63,833	.....	54,151	.....	75,375	.....	57,777	.....	.....	.....
Oregon:													
Elevators	12	2	1	275,000	14	1,650,229	13	2,151,085	1	500,000	11	693	63
Creameries and cheese factories	7	8	2	535,388	5	754,767	9	324,178	5	61,000	14	774	55
Fruit and produce	28	11	9	2,197,646	20	4,220,936	15	888,592	1	25,000	35	4,035	115
Stores	2	4	.....	.....	2	160,289	6	448,456	.....	.....	7	3,541	506
Miscellaneous	.....	4	.....	.....	1	36,000	1	90,000	.....	.....	3	184	61
Total	49	29	12	3,008,034	42	6,822,221	44	3,902,311	7	586,000	70	9,227	132
Average	.....	.....	.....	250,670	.....	162,434	.....	88,689	.....	83,714	.....	.....	.....
Pennsylvania:													
Creameries and cheese factories	25	19	9	338,956	30	757,212	33	1,003,486	10	514,234	38	1,937	51
Fruit and produce	2	2	1	442,533	1	390,500	.....	.....	1	75,000	4	308	77
Stores	.....	4	.....	.....	.....	.....	4	66,209	3	67,000	4	422	106
Tobacco	1	1	.....	.....	.....	.....	2	97,000	.....	.....	2	630	315
Miscellaneous	4	4	3	207,763	5	337,200	4	99,500	1	100,000	8	42,292	5,287
Total	32	30	13	989,252	36	1,484,912	43	1,266,186	15	756,234	56	45,589	814
Average	.....	.....	.....	76,096	.....	41,248	.....	29,446	.....	50,416	.....	.....	.....
Rhode Island:													
Stores	2	1	.....	.....	2	101,630	1	34,000	.....	.....	3	642	214
Miscellaneous	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	180	180
Total	2	2	.....	.....	2	101,630	1	34,000	.....	.....	4	822	206
Average	.....	.....	.....	.....	.....	50,815	.....	34,000	.....	.....	.....	.....	.....

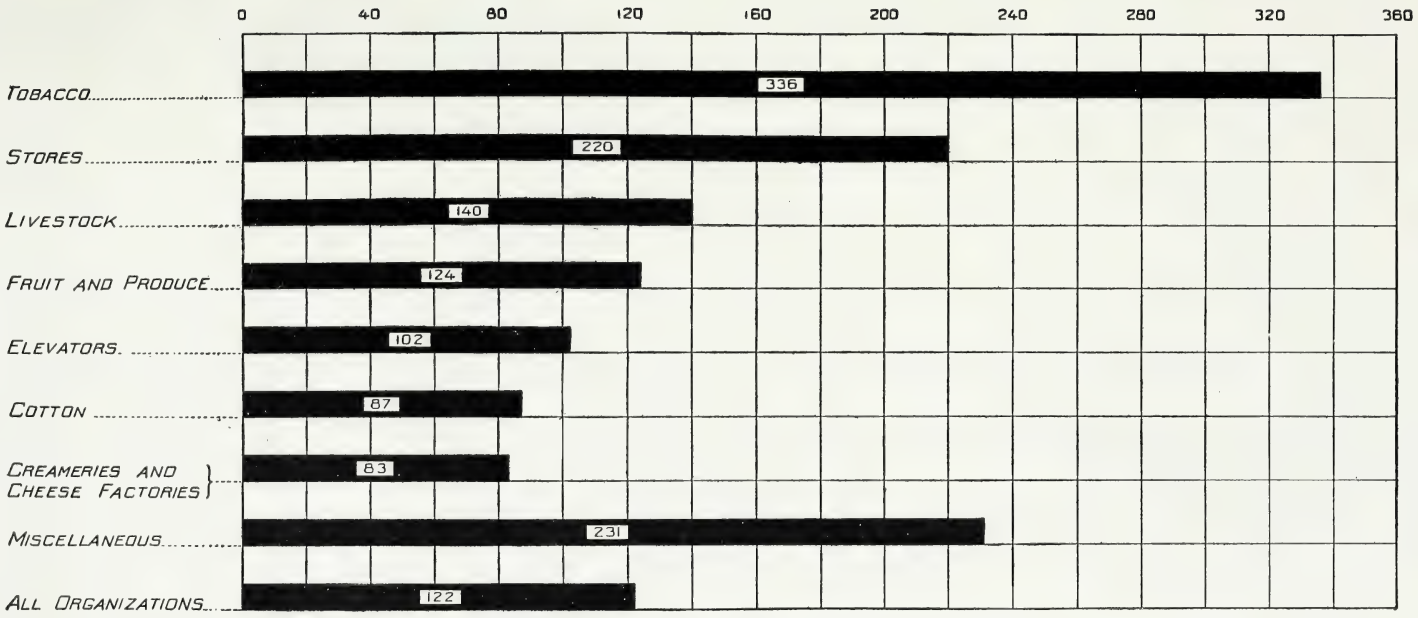
TABLE II.—*Type of organization, volume of business, and number of members of organizations reporting, by States and kinds of business*—Continued.

State.	Type of organization.		Volume of business.								Membership.		
			1912		1913		1914		1915				
	Stock company.	Cooperative.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Total.	Average.
South Carolina:													
Creameries and cheese factories		1					1	$5,500	1	$5,500	1	56	56
Fruit and produce		7					7	17,700	3	526,935	7	357	51
Cotton	10	2			6	$466,500	6	297,500			9	551	61
Stores	2				1	4,500	2	48,000			2	8	4
Tobacco	1										1	18	18
Miscellaneous	5	6			6	319,222	7	329,400	3	73,580	8	902	113
Total	18	16			13	790,222	23	698,100	7	606,015	28	1,892	68
Average						60,786		30,352		86,574			
South Dakota:													
Elevators	105	29	9	$1,814,589	80	9,584,116	86	11,922,155	19	3,206,000	120	11,749	98
Creameries and cheese factories	9	17	8	200,056	18	506,107	16	314,663	5	78,396	21	1,878	89
Fruit and produce	1						1	80,000	1	70,000	1	7	7
Stores	1	3	1	41,194	2	80,998					3	184	61
Miscellaneous	7	4			8	684,615	9	496,311	1	33,000	9	1,242	138
Total	123	53	18	2,055,839	108	10,855,836	112,	12,813,129	26	3,387,396	154	15,060	98
Average				114,213		100,517		114,403		130,284			
Tennessee:													
Creameries and cheese factories	1	1			1	28,000	1	33,000			2	135	68
Fruit and produce	3	12	1	2,000	10	287,838	11	296,950	4	94,800	16	2,339	146
Cotton	5				2	31,000	3	34,000	1	3,500	5	293	59
Stores	2	9			1	3,000	9	178,000	7	203,000	11	1,821	166
Tobacco							1	160,000			1	20	20
Miscellaneous	1	11			2	14,100	7	98,400	3	115,000	14	1,492	107
Total	12	33	1	2,000	16	363,938	32	800,350	15	416,300	49	6,100	124
Average				2,000		22,746		25,011		27,753			

Texas:													
Elevators	6	1	2	275,000	3	470,000	5	915,000			5	525	105
Creameries and cheese factories	5	2	2	37,000	4	182,004	6	237,929	2	30,500	5	217	43
Fruit and produce	8	23	2	2,600,000	14	2,582,104	13	719,700	2	21,200	28	5,612	200
Cotton	56	11			25	2,275,839	36	2,516,495	5	45,000	60	6,713	112
Miscellaneous	2	14					4	191,381	5	69,700	14	1,715	123
Total	77	51	6	2,912,000	46	5,509,947	64	4,580,505	14	165,400	112	14,782	132
Average				485,333		119,781		71,570		11,814			
Utah:													
Elevators	1	3			1	12,000	1	115,000	1	90,000	4	193	48
Creameries and cheese factories	5	4			5	229,723	7	266,709	1	18,000	8	626	78
Fruit and produce	6	3	3	55,903	8	1,008,439	3	835,893			9	1,548	172
Stores		1					1	3,600			1	457	457
Miscellaneous	2	2			2	55,000	5	141,500	1	90,000	5	916	183
Total	14	13	3	55,903	16	1,305,162	17	1,362,702	3	198,000	27	3,740	139
Average				18,634		81,573		80,159		66,000			
Vermont:													
Creameries and cheese factories	10	12	14	564,940	15	688,472	5	252,221	2	111,000	17	699	41
Miscellaneous		1									1	150	150
Total	10	13	14	564,940	15	688,472	5	252,221	2	111,000	18	849	47
Average				40,353		45,898		50,444		55,500			
Virginia:													
Creameries and cheese factories	7	1	1	10,000	4	105,500	4	153,000			5	256	51
Fruit and produce	4	8	4	4,195,000	7	5,816,000	5	46,400	2	52,000	9	3,639	404
Stores		3					1	5,000	1	5,000	3	158	53
Tobacco	3	2	1	22,000			1	133,722	1	150,000	5	402	80
Live stock		1									1	45	45
Miscellaneous	2	24			4	14,100	7	27,687	6	29,600	25	5,318	213
Total	16	39	6	4,227,000	15	5,935,600	18	365,809	10	236,600	48	9,818	205
Average				704,500		395,707		20,323		23,660			
Washington:													
Elevators	37	11	5	1,400,000	32	5,215,431	36	6,021,978	7	1,448,000	47	4,207	90
Creameries and cheese factories	3	10	1	14,500	10	786,291	11	922,345	1	75,000	13	1,233	95
Fruit and produce	17	30	11	2,538,887	27	8,056,784	19	8,182,701			48	13,774	287
Stores	3	8			6	660,535	11	1,306,267	2	305,000	12	11,492	958
Miscellaneous	3	4	1	200,000	3	163,000	4	161,000			5	417	83
Total	63	63	18	4,153,387	78	14,882,041	81	16,594,291	10	1,828,000	125	31,123	249
Average				230,744		190,795		204,868		182,800			

TABLE II.—*Type of organization, volume of business, and number of members of organizations reporting, by States and kinds of business*—Continued.

State.	Type of organization.		Volume of business.								Membership.		
			1912		1913		1914		1915				
	Stock company.	Cooperative.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Volume.	Number reporting.	Total.	Average.
West Virginia:													
Fruit and produce	3	1									4	370	93
Stores		1							1	$30,000	1	150	150
Miscellaneous		7			1	$9,000	3	$25,000	3	27,000	6	1,022	170
Total	3	9			1	9,000	3	25,000	4	57,000	11	1,542	140
Average						9,000		8,333		14,250			
Wisconsin:													
Elevators	13	6			14	743,104	13	1,056,055	2	217,921	19	2,325	122
Creameries and cheese factories	119	171	81	$3,895,677	216	10,132,421	160	7,655,547	16	1,646,000	265	19,726	74
Fruit and produce	12	12			17	784,908	16	877,195			22	1,806	82
Stores	7	24	5	90,600	17	639,332	13	501,161	3	110,000	27	3,781	140
Live stock	1	6			3	110,468	3	274,464	1	20,000	7	1,093	156
Miscellaneous	6	8	5	162,000	8	426,320	13	404,282	2	50,000	15	2,760	184
Total	158	227	91	4,148,277	275	12,836,553	218	10,768,704	24	2,043,921	355	31,491	89
Average				51,213		46,678		49,398		85,163			
Wyoming:													
Elevators	1	6			2	440,000	5	302,500			8	559	70
Creameries and cheese factories	1	1			1	12,000	2	156,312	1	160,000	2	70	35
Stores	2						1	40,000			1	58	58
Live stock		1									1	12	12
Miscellaneous		2					2	78,790			4	685	171
Total	4	10			3	452,000	10	577,602	1	160,000	16	1,384	87
Average						150,657		57,760		160,000			
United States:													
Elevators—													
Total	1,074	496	284	45,414,704	960	130,555,221	913	132,665,430	180	26,182,831	1,471	149,618	
Average				159,911		135,995		145,307		145,460		102	
Creameries and cheese factories—													
Total	521	1,124	379	17,467,709	1,187	59,701,123	953	46,106,095	176	8,256,921	1,443	119,444	
Average				46,089		50,296		48,380		46,914		83	



Average Number of Members for Each Class of Organization.

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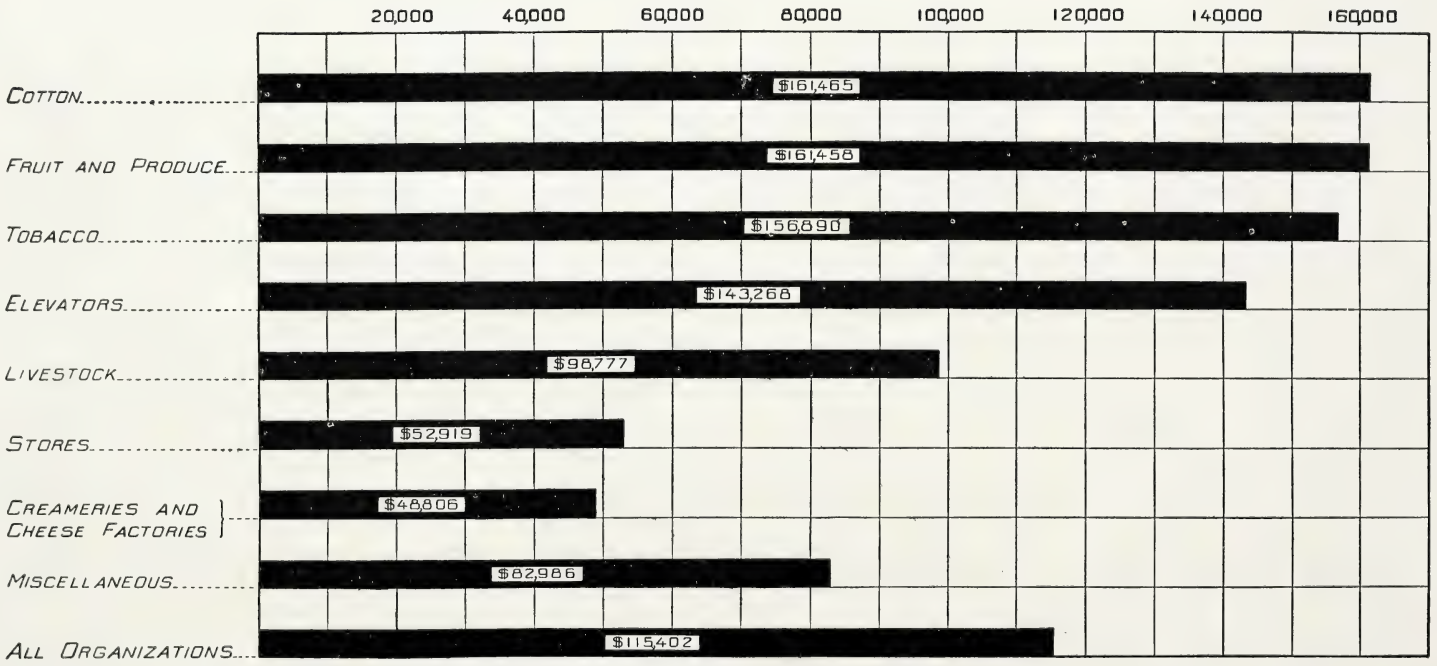
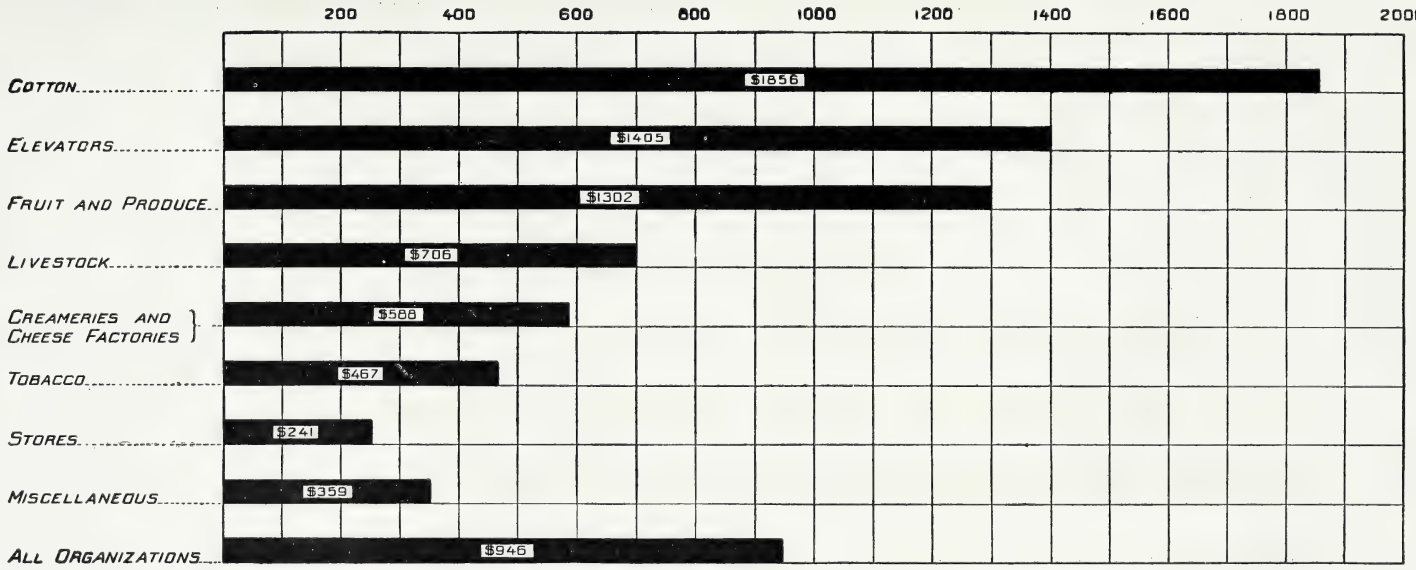
Chart 5.



AVERAGE BUSINESS PER ORGANIZATION BY CLASS.

CHART 6.



AVERAGE BUSINESS PER MEMBER FOR EACH CLASS OF ORGANIZATION.

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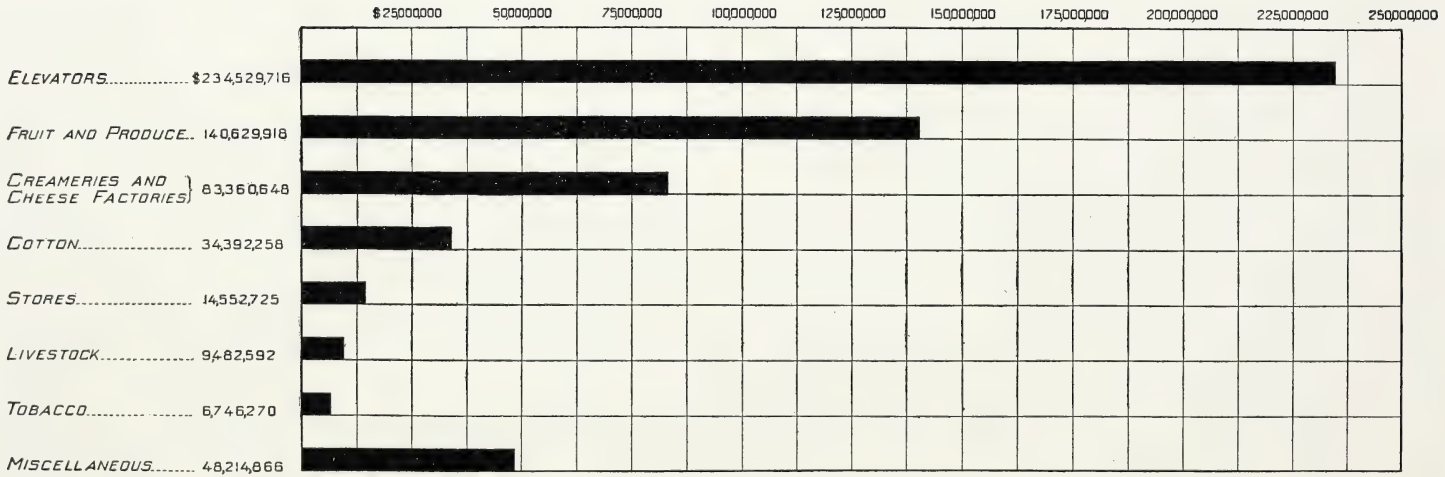
CHART 7.



VOLUME OF BUSINESS OF ALL ORGANIZATIONS BY CLASSES.

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CHART 8.

Fruit and produce—													
Total	307	504	134	51,174,791	456	70,221,381	384	38,774,320	58	6,454,362	778	96,806	
Average				381,901		153,994		100,975		111,282		124	
Cotton—													
Total	156	40	1	15,000	79	15,097,844	102	17,036,511	18	143,550	145	12,684	
Average				15,000		191,112		167,025		7,975		87	
Stores—													
Total	90	163	28	1,253,094	111	5,928,11.	164	9,311,712	38	1,552,501	235	51,718	
Average				44,753		53,406		56,779		40,855		220	
Tobacco—													
Total	32	7	1	22,000	18	2,555,420	17	3,084,401	2	300,000	32	10,742	
Average				22,000		141,968		181,435		150,000		336	
Live stock—													
Total	17	64	14	2,235,057	44	4,823,539	49	3,914,260	10	584,000	85	11,887	
Average				159,646		109,626		79,883		58,400		140	
Miscellaneous—													
Total	219	313	48	5,632,718	244	21,730,668	295	23,247.487	52	2,417,206	494	114,197	
Average				117,348		89,060		85,156		46,484		231	
Grand total	2,416	2,711	889	123,215,073	3,099	410,613,313	2,877	274,140,216	534	45,891,371	4,683	567,096	
Grand average				138,600		132,499		95,287		85,939		122	

Requests for information were sent out at various times as new names were added to the list, and in the case of a number of associations several requests were made before any reply was received. This work extended over the years 1914 and 1915; consequently the volume of business reported by the organizations is distributed over a number of years. A few reported their business for 1912 and a few for 1915, but most of the reports cover the years 1913 and 1914. Many of the associations reported the volume of business for more than one year, therefore there are some duplications. In order to get the average volume of business, the reports for the four years have all been taken into consideration. The total shown for each year must not be taken as the total volume of all associations for that year. A total of 889 associations reported their volume of business for 1912; 3,099 reported for 1913; 2,877 reported for 1914; and 534 reported for 1915. The average volume shown for the years 1912 and 1915 can not be taken as representative of the true average in every case because of the small proportions of the total number reporting for those years.

The last three columns of Table II show the number of each class of organization and the total number of organizations reporting their membership; the total membership and the average membership per association also is shown. (See also chart 4.) The average membership of all the organizations reporting is 122. Tobacco associations show the largest average, having 336; the miscellaneous associations, 231; stores, 220; live stock, 140; fruit and produce, 124; elevators, 102; cotton, 87; and creameries and cheese factories, 83. (See also chart 5.)

All of the organizations did not report on every point concerning which information was requested, but using the average of those reporting as a basis, estimates have been made of the annual volume of business and the membership of all organizations reporting. These estimates are shown in Table III, and are presented graphically in charts 6 and 7. It is estimated that the 5,424 organizations reporting have an annual volume of business of $625,940,448 and a total membership of 661,728. In the matter of volume of business the elevators take the lead with an estimated total of $234,529,716; next come fruit and produce associations with a total of $140,629,918; creameries and cheese factories are third with $83,360,648; then the miscellaneous marketing associations, $48,214,866; cotton associations, $34,392,258; stores, $14,552,725; live stock shipping associations, $9,482,592; and tobacco associations, $6,746,270. (See also chart 8.)

TABLE III.—*Estimated volume of business and membership by kinds of organizations.*

Kind of organization.	Number of organizations.	Annual volume of business.		Membership.	
		Estimated total.	Average of organizations reporting.	Estimated total.	Average of organizations reporting.
Elevators	1,637	$234,529,716	$143,268	166,974	102
Creameries and cheese factories	1,708	83,360,648	48,806	141,786	83
Fruit and produce	871	140,629,918	161,458	108,004	124
Cotton	213	34,392,258	161,465	18,531	87
Stores	275	14,552,725	52,919	60,500	220
Tobacco	43	6,746,270	156,890	14,448	336
Live stock	96	9,482,592	98,777	13,440	140
Miscellaneous	531	48,214,866	82,986	134,211	231
Total	5,424	[1] 625,940,448	115,402	[1] 661,728	122

[1] Total volume of business and total membership obtained by multiplying average reported by total number.

FARMERS' GRAIN ELEVATORS AND WAREHOUSES.

Number and location.—The 1,637 grain elevators and warehouses that reported are distributed among 23 States, as shown in Table I. North Dakota reports 264, Minnesota 241, Iowa 228, Illinois 192, Nebraska 183, Kansas 153, and South Dakota 135. (See also Chart 9.) In other words, over 85 per cent of the elevators reporting are located in these seven States of the grain belt. In Oregon, Washington, Idaho, Utah, and Colorado practically all of the grain has been handled in sacks until recently; consequently the farmers in these States have operated warehouses instead of elevators. Terminal facilities are now being completed in the Pacific coast grain centers for handling grain in bulk, and many of the warehouse companies are preparing to construct elevators. When the practice of handling grain in bulk at the terminal markets becomes general the warehouses gradually will be replaced by elevators. One of the chief reasons for bringing about this change has been the high cost of grain sacks, the price of which has increased rapidly during the last two years.

It is estimated that there are a few hundred farmers' grain marketing organizations from which no reports have been received, but as the larger and more successful concerns appear to have been the most prompt in replying to the request for information, it is believed that the majority of those not replying are smaller organizations.

Plan of organization.—One thousand and seventy-four elevators and warehouses report being organized as capital stock companies, and 496 as cooperative companies. It must be borne in mind that those in the latter group are also for the most part organized with capital stock. The first class consists of those concerns which manage their business and distribute their profits according to the method commonly followed by stock companies. Companies which had

only a few members or which appeared to have most of the stock owned by one or a few individuals were excluded entirely. While 1,074 elevators do not distribute their profits in a cooperative manner, many of them have certain cooperative characteristics. In all of them the stock is distributed among a number of farmers; in some there is a limit to the number of shares one person may own; often there are regulations in regard to the transfer of stock; and many of these organizations adhere to the "one man one vote" principle. There are many cases where the stock is distributed among farmers, few holding more than one share. The main point on which these organizations fail to live up to cooperative principles is in the distribution of profits, since they fail to make use of the patronage dividend. In this connection the fact should be borne in mind that many of the States only recently have enacted cooperative laws, and in many instances the payment of dividends according to patronage has not been provided for. The elevators grouped in the cooperative class limit their stock dividends and distribute any further profits in the form of patronage dividends. Some of these pay patronage dividends to all of the patrons and some only to the patrons who are members. Often the nonmembers are paid at one-half the rate to members and some associations provide that the dividends to nonmembers shall be applied toward the purchase of a share of stock. The shares in these companies range from $10 to $100; in most cases the par value is from $10 to $25.

Business transacted.—As previously stated, the reports for the volume of business are not all for the same year. The average volume of business of those reporting was $143,268; applying this average to all of the 1,637 elevators reporting, an annual business of $234,529,716 is shown.

A large number of elevators carry side lines in addition to handling grain. Of the 1,637 elevators, 630, or 38 per cent of the total, handle fuel, indicating that the farmers' elevators have found this practice desirable. In most cases farmers themselves shovel the coal from the bins in order to reduce the handling charge to a minimum. Most of the coal is hauled by the farmers on the return trip from the elevator during the season when grain is being delivered. The largest number of elevators which handle fuel was reported from Iowa, this State having 99; North Dakota reported 94, Kansas 85, Nebraska 82, Minnesota 75, South Dakota 71, and Illinois 66.

The handling of live stock was reported by 132 elevators. Of this number 58, or a little over one-third, are located in Nebraska, showing how prevalent this practice is in that State; Iowa reported 20, South Dakota 13, and Minnesota 12 elevators handling live stock. Separate live stock shipping associations have sprung up in many

communities during the last few years, and if it were not for this fact more elevators might be handling this side line.

The handling of lumber was given as a side line by 80 elevators. Of this number Iowa reported 33, Nebraska 13, and Illinois 10. The much smaller number of elevators handling lumber than fuel is accounted for largely by the fact that the carrying of lumber as a side line requires a greater outlay of capital and also takes up more of the manager's time than does the handling of fuel. It is not necessary to keep a very large supply of fuel on hand, while a considerable stock of lumber is required in order to have a supply of the various grades and kinds that are likely to be called for. One elevator reports having handled $75,000 worth of lumber in one year, showing that in some cases lumber is an important item in the elevator business.

Kansas has 12 of the 28 elevators reporting the handling of fruit and produce. Of the 16 elevators handling merchandise, 6 are in Kansas and 3 in Montana; 640 elevators report the handling of miscellaneous products and supplies. In this class are included elevators handling such materials as binding twine, fence wire and posts, cement, oil, and miscellaneous items.

Members.—In Table II it is shown that 149,618 farmers compose the membership of 1,471 elevator and warehouse companies, an average of 102 for each company. Using this average as a basis, it is estimated that the 1,637 concerns covered by this report represent approximately 166,974 grain farmers, all of which directly benefit by the organizations of which they are members. A great many farmers who are not members but who ship their grain through the farmers' company derive benefits from it. Among such benefits would be the nonmember dividend where paid, and the advantage to all farmers in the community if the company in any way secures better prices for the farmers than were paid them before its organization. Such conditions as these exist in communities where, previous to the establishment of the farmers' company, no competition of any extent prevailed in the purchase of grain. From reports received as to the number of nonmembers who ship through farmers' companies, it is estimated that at least 125,000 who are not members market their grain through the 1,637 elevators covered in this survey. This number, plus the number of members, brings the total number of farmers doing business with these concerns to approximately 289,000.

New companies.—New companies are being formed constantly. No accurate record of the number has been kept from year to year but from such information as is available at this time it is estimated that several hundred companies were formed during 1914. Not all of these reached the point of doing business, because of trouble in securing capital or some other difficulty.

CREAMERIES AND CHEESE FACTORIES.

Number and location.—The 1,708 creameries and cheese factories which reported are distributed among 39 States as shown in Table I. Two-thirds of this number are located in the three States, Minnesota, Iowa, and Wisconsin, which States report 624, 301, and 204, respectively. New York has 75, Michigan 70, and the rest are widely distributed among 34 States. (See Chart 10.)

Plan of organization.—Classified according to the plan of organization as shown in Table II, there are 521 creameries and cheese factories which are operated on a capital stock basis and 1,124 which are cooperative. In many of the organizations operated on the capital stock company plan, the shares are distributed widely among the patrons and the plant is operated principally for their benefit. A much larger proportion of creameries and cheese factories are truly cooperative than is the case with farmers' elevators. This is due to the difference in the method of operation. The elevators pay cash for the grain as it is received, while most of the farmers' creameries make payments covering from 10 to 30 days' deliveries, deduct expenses and the necessary amounts for a reserve fund from the receipts of the sale of butter, and distribute the balance among the patrons according to the amount of raw material each has delivered. A creamery which operates on this basis is cooperative in the fullest sense of the word, even though it may never pay patronage dividends. A few of the companies pay the legal rate of interest on stock, charging this amount as an operating expense and deducting it from the returns.

Some of the creamery and cheese factory associations are formed on the nonstock plan. In such an organization the farmers have borrowed the necessary capital on a joint note signed by the members, this loan being repaid by assessments on each pound of butter fat or on each 100 pounds of milk delivered. An interesting situation is found at some of the creameries that have followed this method of financing the enterprise in that the debt has been paid but no one has anything to show that he has any interest in the creamery property, and as some of these associations are not incorporated it is a question as to who really owns the plant. Some of the organizations have found it desirable to buy in the capital stock of its members in the same manner as outlined above; this makes the creamery the property of all the patrons. Considerable difficulty would be experienced in liquidating one of these companies if the assets exceeded the liabilities, as ownership could be claimed by all patrons, past and present, who in any way had contributed to the business.

Business transacted.—The volume of business was reported for the years 1912 to 1915, inclusive, some organizations reporting for

each year; the average volume as reported was $48,806. Using this average as a basis, the annual volume of business for the 1,708 creameries and cheese factories reporting is $83,360,648. (See Table III.)

Only 58 of the creameries and cheese factories report handling products or supplies other than milk or cream. Five report handling fruit and produce, four report fuel, three live stock, two grain, and forty-four miscellaneous products. There is a striking contrast between creamery and cheese factory associations and elevator companies in this regard. Various reasons may be given in explanation of this difference. The creameries and cheese factories have a more uniform seasonal distribution of work than do the elevators, and the nature of the butter maker's or cheese maker's duties makes it inconvenient for him to attend to outside duties. It may not interfere very much with the work of the elevator manager for him to go out and assist a farmer in loading fuel, lumber, or other supplies, but it would be an unsatisfactory arrangement to have the butter maker divide his efforts between making butter and loading lumber or shoveling coal. The elevators are all on the railroad, are convenient for the unloading of supplies, and usually have ample warehouse and storage facilities. The creameries are often located at some distance from the railroad and usually lack the proper storage places for the handling of supplies.

Members.—The average membership reported was 83, or a total of 141,786 members in the 1,708 associations. As in the case of the elevators, many farmers are patrons of the creameries who do not hold memberships. Unlike patrons of many elevators, however, patrons of a large number of the creameries and cheese factories share in the benefits of the organization on the same basis as members, the farmer who delivers all of his product to the company being considered a member. There are cases where stock ownership forms the basis of membership, and others where the payment of a small fee is necessary to obtain the benefits of the association.

New companies.—The organization movement among dairy farmers is much older than that among the grain farmers; consequently, during the last few years the number of new farmers' creameries and cheese factories formed has been greatly exceeded by the number of farmers' grain elevators which have come into existence. The most rapid growth of the farmers' elevator movement has occurred during the last five years, while the height of the rapid organization period with creameries and cheese factories was reached about 1912.

A few central selling associations are being formed, and indications are that a great many of these will be created in the next few years by federating the present companies in a given territory, as the opinion prevails among the companies that better means must be provided

for selling the products now manufactured. Two of the central selling companies now operating are described in detail elsewhere in this report.

FRUIT AND PRODUCE MARKETING ASSOCIATIONS.

Number and location.—The 871 fruit and produce associations that reported have a much wider distribution throughout the country than any other class of cooperative enterprise, 42 States having one or more of these farmers' companies as shown in Table I. (See also Chart 11.) The leading States, and the number reporting from each, are California 124, Arkansas 63, Florida 55, Washington 52, Oregon 40, Louisiana 34, Missouri 34, New York 32 and Texas 31. In California and Florida organizations of citrus-fruit growers are the leading types; in the North Pacific States the apple growers' organizations predominate, and the organizations vary in the other regions of the country according to the principal kinds of fruit and produce raised in commercial quantities.

Plan of organization.—Of the fruit and produce associations, 307 reported operating on the capital stock company plan while 504 reported the cooperative method. Thus compared with elevators, a considerably larger proportion of the fruit and produce companies follow the cooperative method, while the proportion is somewhat smaller than in the case of creameries and cheese factories.

There is a general trend among cooperative fruit and vegetable marketing concerns toward centralized selling and unity of action in matters of mutual interest other than selling. This is accomplished by the federation of small local assembling associations into district organizations; these in turn operate through a central selling agency. In some cases the district or local associations federate for gathering crop and market information and for accomplishing other work which is impracticable for individual associations, but each retains its sales machinery and sales policy. The central sales policy is in operation among the citrus growers of Florida and California and the walnut and almond growers of California, and has from time to time gained and lost in favor among associations in the Pacific Northwest. The plan of federation for gathering information and perfecting better distribution has been used by numerous cooperative and independent companies in vegetable districts in handling unusually heavy crops.

A history of the cooperative movement in many of the fruit and produce districts would show numerous experiments and a rise and fall in the support of the organization from one year to another. Practically all new districts pass through the same general experience as that through which the older organizations passed; consequently, the most successful cooperative fruit and vegetable marketing concerns are usually found in districts where these associations

FIG. 1.—PACKING HOUSE—COOPERATIVE CITRUS FRUIT MARKETING ORGANIZATION.

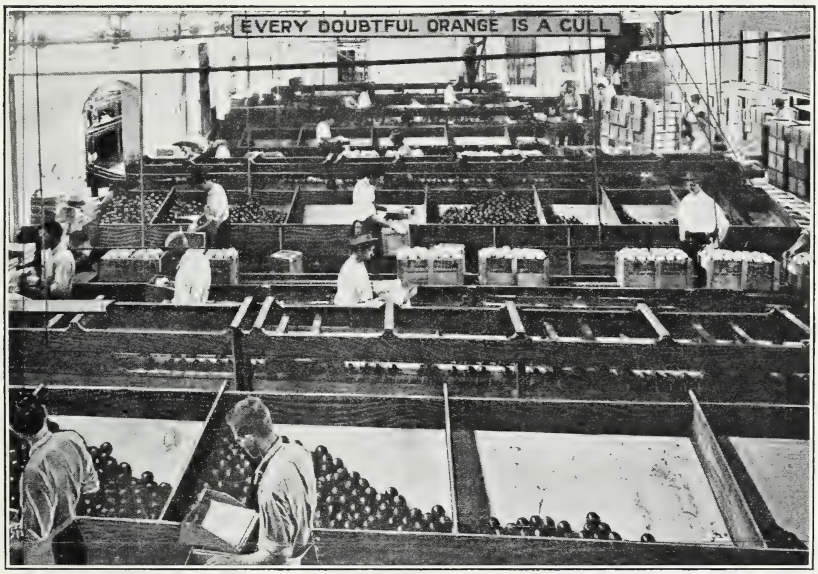

FIG. 2.—INTERIOR VIEW OF PACKING HOUSE—COOPERATIVE CITRUS FRUIT MARKETING ORGANIZATION.

FIG. 1.—FARMERS' COTTON GIN.

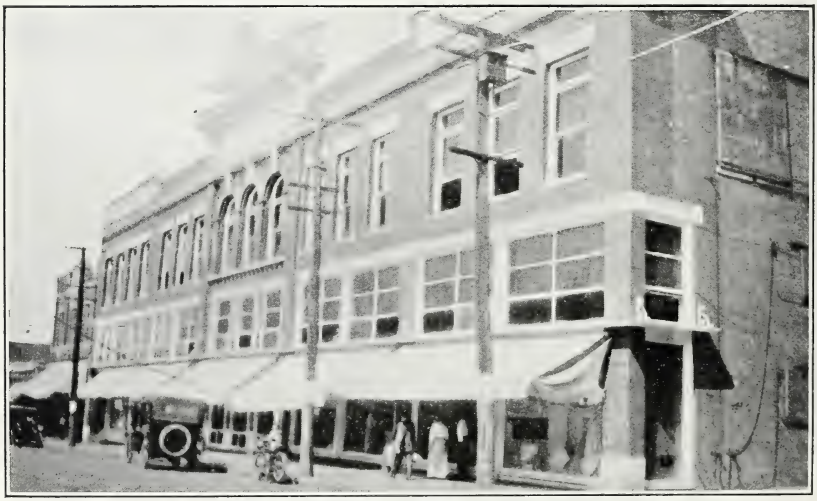

FIG. 2.—FARMERS' COOPERATIVE STORE.

LOCATION OF COOPERATIVE GRAIN ELEVATORS AND WAREHOUSES REPORTING.

CHART 10.

LOCATION OF COOPERATIVE CREAMERIES AND CHEESE FACTORIES REPORTING.

CHART 11.

LOCATION OF COOPERATIVE FRUIT AND PRODUCE ORGANIZATIONS REPORTING.

are not of comparatively recent origin. There are a few exceptions, such as several of the district organizations in the Pacific Northwest which have made rapid progress during the short periods in which they have been in existence.

Cooperation in the marketing and distributing of fruit and vegetable products is found to exist in its greatest strength in sections which are far removed from the consuming centers of the country. In other words, necessity will bring about cooperative organization in order to overcome such handicaps as a long distance from market, the perishable nature of the product which requires skill in marketing and distributing, and lack of sufficient buyers in the fields to purchase the entire crop regularly for cash.

Business transacted.—The average annual volume of business reported is $161,458. Since the total number reporting was 871, this amount gives an estimated total annual volume of business of $140,629,918. In determining this sum care was taken to exclude the figures for the large central organizations, in order to have a representative average, for, if several of these large enterprises were included, the increase in the average would lead to considerable error in estimating the total volume of business. The volume of business of the central organization is the sum total of the business of the local organizations of which it consists, so if these as well as the centrals were included, there would be a duplication.

Box shooks, paper, nails, spray materials, and general growers' supplies are handled by practically all of these organizations. As most of the companies finance the members in purchasing supplies, they have found it less difficult to handle the articles which are needed in large quantities than to depend on various outside sources. Prices, quality, and supply fluctuate to such an extent that many growers have been seriously handicapped in securing the desired articles at the proper time from the miscellaneous sources available. The handling of supplies has been found a profitable business to both the company and the grower and when once begun the practice is seldom discontinued.

Products and supplies are handled by 190 of the fruit and produce associations reporting. Forty-five are engaged in canning; the handling of fertilizers is reported by 11; grain is handled by 5, and the same number report fuel; 4 report merchandise; 2 ship live stock; and 118 handle a number of products classed as miscellaneous.

Members.—The average number of members reported by 778 fruit and produce associations is 124, and the estimated total membership of 875 associations reporting is 108,004.

Usually producers must take out a membership in order to ship their products through these organizations. Membership fees range

from $5 to $100, and the memberships are nontransferable in practically all cases. In a few instances the mere signing of contracts to deliver all of certain products to the association for sale, constitutes membership. These contracts are continuous and the grower's right to cancel them is restricted to certain periods of each year.

New companies.—Cooperation among fruit and produce associations is passing through a stage of experimental development in most sections of the country, and is developing rapidly in many of the truck and newer fruit producing sections of the United States, especially in the South. New concerns are launched each year. Although some of them endure but a short time, indications point toward a rapid development in the next few years in cooperative methods of handling perishable products in the producing sections of the country.

Fruit and vegetable canneries.—Forty-five of the companies which are classed as fruit and produce associations in this study operate canneries. Practically all of these organizations are engaged primarily in canning fruit and vegetable products, but most of them ship products in the fresh state when markets are considered good. The largest number of farmers' canneries are found in Indiana and the North Pacific States; the business ranges from $10,000 to $1,500,000 each per year. Various small berries, larger fruits, and vegetables are canned. A few of these concerns operate vinegar plants and evaporators in conjunction with the canning business.

About $3,500,000 was received for canned and dried fruits and vegetables by cooperative canning plants in 1914. This is a comparatively small amount, since the value of this business as a whole in the United States for 1914 was in excess of $158,000,000. Few farmers' canneries have succeeded. In one State alone 80 canneries which were organized during a period of 10 years by local farmers are now out of existence. None attained any degree of success.

COTTON ORGANIZATIONS.

Reports were received from 213 cotton associations distributed among 14 States. Over one-half of them are located in the States of Texas and Georgia, the former reporting 71 and the latter 44. Alabama reported 19, Arkansas 15, South Carolina 14, Oklahoma 13, Mississippi 11, and North Carolina 10; and the remainder are scattered over the other cotton-producing States of the South. Practically all are cotton warehousing associations. Comparing the number of grain elevators and the number of cotton associations, it is evident that the cotton growers of the South are not nearly as well organized as the grain growers of the North Central States.

The capital stock company plan of operation seems to be the favorite plan for the cotton associations, 156 reporting this form and 40 reporting the cooperative form. The cotton organizations resemble the grain elevators in this respect.

The average volume of business of the organizations reporting on this point was $161,465. This makes a total for the 213 organizations of $34,392,045.

One hundred and forty-five associations reported an average of 87 members, which number gives a total of 18,531 members for the entire 213 associations reporting.

The handling of other products and supplies was reported by 25 associations. Of this number, 7 handle fertilizers, 3 grain, 1 fuel, and 14 miscellaneous products.

COOPERATIVE STORES.

The 275 stores that reported are well distributed over 35 States. Kansas has 36, Wisconsin 32, Minnesota 30, North Carolina 17, and Iowa 14. (See Table I.) It is probable that there are a number of cooperative stores in existence whose names have not been secured, for it was found that the agencies that furnished the names were more likely to overlook cooperative stores than any of the organizations engaged more directly in the marketing of agricultural products.

More stores reported as operating under the cooperative plan than under the stock company plan of doing business; 163 reported the former and 90 the latter plan.

The average volume of business reported was $52,919, making a total of $14,552,725 for the 275 stores which replied. The average number of members reported by the stores was 220 per association, a total of 60,500 for the 275 stores. Of the 275 stores, 97 reported handling side lines; 15 reported fruit and produce, 6 of these being in Kansas; 9 reported grain; 8 reported fuel; 6 ship cream, 4 of these being in Kansas; 5 handle fertilizers; 4 cotton; 3 lumber; 1 live stock; and 46 handle miscellaneous products and supplies.

TOBACCO ASSOCIATIONS.

The State of Kentucky is the home of 21 of the 43 tobacco associations reporting. There were 7 in Ohio, 5 in North Carolina, and 5 in Virginia. Of the 39 tobacco associations concerning which information on the type of organization was obtained, 32 were placed in the capital stock company class and the remaining 7 in the cooperative. The average volume of business of those reporting on this point was $156,890, making a total annual volume of $6,746,270 for the 43 organizations reporting. The average membership reported by tobacco associations is larger than for the other kinds of business, being 336, or a total of 14,448 members in the 43 associations. The

activities of these organizations are restricted largely to the handling of tobacco. Only two reported the handling of any other product; one reported fertilizers and the other miscellaneous products.

LIVE STOCK ASSOCIATIONS.

Farmers' associations for the marketing of live stock are of recent origin, most of them having developed during the last few years. The form of organization is more or less informal. As most of them do not own any property or need any great amount of capital, they are frequently not incorporated under the State laws. On this account there are undoubtedly a number of live-stock shipping associations of which the names have not been reported, and also a large number that have failed to reply to the request for information. In all, 96 of this class reported; 30 are in Minnesota, 25 in Nebraska, 20 in Iowa, and the remaining 21 are distributed among 11 States.

The method commonly used by these organizations is to ship the stock and, after the returns of the sale are received, to make deductions to cover the necessary expenses, including the manager's commission, and to pay the remainder to the farmers. It is therefore not strange that 64 of the associations reported the cooperative form of organization and that only 17 followed the stock company method of doing business.

The average volume of business reported is $98,777, or a total of $9,482,592 for the 96 associations. The average number of members is 140, or a total of 13,440 members.

Side lines are handled by 35 of these live stock associations. Fuel is reported by 9, lumber by 5, merchandise by 1, produce by 1, cream by 1, and miscellaneous products and supplies by 18.

MISCELLANEOUS ORGANIZATIONS.

Of the organizations reporting, 581 were classed as miscellaneous. (See Table I.) Some of these handle only one product, while others market a variety of products. When only a few associations were handling a certain product, they were placed in the miscellaneous class, as were the organizations whose kind of business could not be ascertained accurately. The geographical distribution of the miscellaneous organizations is fairly uniform, 47 of the States being represented. The leading States in point of number are Nebraska 46, Kansas 39, Maine 39, California 34, Iowa 31, North Carolina 28, Washington 28, Minnesota 27, Idaho 26, and Illinois 24.

The miscellaneous organizations show a larger number reporting the cooperative plan than the stock plan, there being 313 of the former and 219 of the latter. The average annual volume of business

of this class of organizations is $82,986, making the total for the 581 organizations $48,214,866.

Four hundred and ninety-four organizations reported an average membership of 231; at this rate the total membership in the 581 associations is 134,211.

Some of the associations which have been included in the miscellaneous class failed to report the products and supplies handled. The others reported handling a variety of products. Fruit and produce are handled by 68, fuel by 43, lumber by 42, fertilizers by 42, grain by 22, nuts by 19, cream by 13, cotton by 12, live stock by 7, merchandise by 5, tobacco by 3, and miscellaneous products and supplies, other than those mentioned, are handled by 339.

COOPERATION IN REPRESENTATIVE STATES.

In order to give a clear presentation of the status of organization in the various parts of the United States, brief statements showing the results of the survey in different States are included. By selecting States representative of the different sections of the country, the varying conditions surrounding the organization of the farmers are shown. Several of the States of the North Central group have been included because in this section cooperation among farmers is more general than in any other part of the country. States have been selected also to show the extent of agricultural organization among the fruit growers of the West, the farmers of the South, of the tobacco belt, the truck-growing regions, and the older farming regions of the North Atlantic States.

MINNESOTA.

Minnesota leads the States in the number of cooperative organizations of farmers. Of the 5,424 organizations in the United States which are included in this survey, 980, or 18 per cent of the total, are located in Minnesota. The prominence of Minnesota's place in the matter of marketing organizations among the farmers is largely due to its importance as a dairy State. Cooperative creameries and cheese factories make up about 63 per cent of Minnesota's total, while the elevator companies comprise about 25 per cent. The remaining 12 per cent include live-stock shipping associations, fruit and produce associations, and a few miscellaneous organizations.

The creameries and cheese factories of Minnesota show the possibilities of such farmers' organizations. Over 600 of the 850 creameries of the State are owned by the farmers. Table II shows that most of these creameries are cooperative in character. Nearly all of the farmers' associations in Minnesota which report the stock-company plan of organization are farmers' elevators; the other classes adhere much more closely to cooperative principles in the method of conducting their business.

An estimate of the volume of business transacted by the farmers' marketing organizations of Minnesota can be made by using the figures reported by a large proportion of the associations as a basis. The total annual volume exceeds $50,000,000. The 980 organizations reporting have about 90,000 members, which gives an indication of the extent of organization among farmers for manufacturing and marketing purposes in this State.

IOWA.

As Iowa is represented by 505 farmers' marketing organizations, it is second to Minnesota in number reporting. Conditions in Iowa and Minnesota are very similar, and the farmers' organizations have followed the same lines in both States. The two leading forms of organization in Iowa are elevators and creameries, as these two classes make up over 85 per cent of the total reporting. Iowa falls behind Minnesota in total number of organizations largely because of its smaller number of creamery and cheese-factory associations, Iowa reporting 204 and Minnesota 624 organizations of this character.

WISCONSIN.

Wisconsin ranks third in the number of organizations reporting. Conditions in this State differ somewhat from those in Minnesota and Iowa. The latter are important grain-raising States and have a number of farmers' elevators, while in Wisconsin, where grain is not grown on such an extensive scale, there are comparatively few farmers' elevators. Wisconsin is an important dairy State; therefore 75 per cent of the companies reporting are creameries or cheese factories. In Minnesota and Iowa nearly all of the dairy organizations are creameries, while in Wisconsin there are a large number of cheese factories as well. The other forms of organization found in Wisconsin are of the same nature as those found in Minnesota and Iowa.

KANSAS.

Kansas is another member of the group of States where farmers' organizations are the most numerous. It is an important grain State; consequently over 60 per cent of the associations reporting from this State are farmers' elevator companies. Kansas may be contrasted with Wisconsin in the matter of farmers' associations; the former has a large number of grain elevators and only a few creamery or cheese-factory organizations, while the situation is reversed in the latter State.

CALIFORNIA.

Conditions surrounding the organization of farmers in California are decidedly different from those in the North Central States. California is one of the leading fruit-growing States, and as the fruit

grower has found it profitable to organize for the marketing of his products, it is not strange that over 60 per cent of the organizations which reported from this State belong to the fruit and produce class. The others consist of creameries and cheese factories, stores, olive and nut associations, and various miscellaneous farmers' marketing enterprises.

Cooperation in this State is noted especially for the central organizations made up of local units which are found among the citrus, walnut, almond, raisin, and apple growers. The elevators and creameries of the North Central States for the most part have been content with the method of allowing each local concern to look after the marketing of its own products independent of neighboring associations of the same character. The fruit growers of California have found it advantageous to unite their local associations into central selling bodies. It must not be inferred that this is the only State where such central organizations are found, for there are a number of examples of such centralization throughout the United States, but the success of this form of endeavor has been particularly notable in California.

THE NORTH PACIFIC STATES.

The four Pacific Northwestern States—Oregon, Washington, Idaho, and Montana—may be grouped together in considering farmers' marketing activities. Conditions are similar in the four States with reference to organization and some of the lines of activity extend to all of the States in the group. Of the 329 organizations which reported from these four States, about 35 per cent are fruit and produce associations, 30 per cent are grain elevators or warehouses, 15 per cent are creameries or cheese factories, 7 per cent are stores, and 13 per cent are classed as miscellaneous associations.

The central selling organizations found in these States among the apple growers are the most notable. For the last five years various movements have been set on foot to make the fruit growers' associations in these States more effective. These movements have resulted in the rise and fall of numerous central selling or other associations, and a continual changing of affiliations and policies on the part of local associations. In this region are a number of very successful canneries which have been established to take care of fruit and vegetable products which can not be marketed to advantage in the fresh state. Not all of the canneries established have been successful, for a large number of failures were reported.

TEXAS.

The State of Texas may be considered by itself because of the conditions here represented. Over 50 per cent of the organizations reporting from this State are cotton associations and about 20 per cent

are fruit and produce associations. In the remaining number are a few creameries, a few grain elevators, and some miscellaneous organizations.

FLORIDA.

Florida, like California, is interesting because it is represented largely by organizations for the marketing of perishable products, such as citrus fruits. About 80 per cent of the organizations reporting from this State belong to the fruit and produce class, which indicates the importance of this form of organization in the State. The other associations in the State belong principally to the miscellaneous class.

NORTH CAROLINA, SOUTH CAROLINA, AND GEORGIA.

The States of North Carolina, South Carolina, and Georgia have been placed in one group, since they are representative of that section of the United States. Of the total number of organizations which reported from these three States, about 41 per cent handle cotton in the capacity of warehousemen, this form of organization being especially common in Georgia; about 12 per cent handle fruit and produce; about 12 per cent are stores; over 25 per cent fall in the miscellaneous class; and the remainder consists of a few creameries and tobacco associations and one live-stock association.

KENTUCKY.

From the standpoint of organization of producers for marketing purposes, the State of Kentucky is interesting because of its tobacco growers' associations. Almost one-half of the tobacco associations from which reports have been received are located in this State. Kentucky reported 66 organizations, and of this number 21 are tobacco associations, 15 are fruit and produce associations, 17 are listed as miscellaneous, 6 are stores, 6 creameries or cheese factories, and 1 a grain elevator company.

VIRGINIA, MARYLAND, AND DELAWARE.

The States of Virginia, Maryland, and Delaware reported a total of 82 marketing associations. Of this number, 39 are miscellaneous organizations, 22 are fruit and produce associations, 12 are creamery or cheese factory associations, 5 handle tobacco, and 1 handles live stock. These States are in a truck and fruit growing section, and this fact accounts for the organizations which handle fruit and produce. There are some good examples of central marketing organizations among the truck growers in this section of the United States.

NEW YORK.

One hundred and twenty-four organizations in the State of New York reported. About 60 per cent of this number are creamery and cheese factory associations, about 25 per cent handle fruit and produce, and the rest is made up of a few cooperative stores and miscellaneous organizations.

THE NEW ENGLAND STATES.

The New England group of States reported a total of 157 marketing organizations. Of this number 61 are creameries, 49 are miscellaneous, 27 handle fruit and produce, 19 are stores, and 1 is a grain elevator.

REPRESENTATIVE TYPES OF COOPERATIVE ORGANIZATIONS.

Requests for more detailed information were sent out to some of the larger cooperative associations and also to organizations typical of a certain class or illustrative of some special development along cooperative lines. The data secured from the replies to these requests furnished the basis for the brief statements which follow. This information is included in order to show what is being accomplished by some of the cooperative organizations.

These particular organizations were selected because more detailed information as to their methods of operation was available for them than for other representative cooperative associations. A great many cooperative companies besides those mentioned here are worthy of study and special consideration by students of cooperation and by those who are contemplating the formation of new cooperative enterprises.

THE CALIFORNIA FRUIT GROWERS' EXCHANGE.

The California Fruit Growers' Exchange is a cooperative organization of citrus growers through which over 60 per cent of the citrus fruit shipped out of California is distributed. The annual report of the general manager for the year ending August 31, 1916, shows that the exchange shipped 24,024 cars of oranges and grapefruit and 5,799 cars of lemons during the year. The amount returned to the growers for this fruit exceeded $27,000,000. At present over 8,000 growers are members of the exchange.

The growers are organized into local associations, which in turn are members of district exchanges, and these are united in the central exchange. The local associations are made up of the growers in a community, the membership ranging from 40 to 200. The fruit is assembled and prepared for shipment by the local associations. The district exchanges order cars for the local associations in their respective districts, keep records of the cars shipped, receive the returns from the central exchange and distribute the proceeds to the local associations, and keep the local associations informed with regard to matters pertaining to the industry. The central exchange provides the facilities for the distribution and marketing of the fruit of its members.

The California Fruit Growers' Exchange has agencies in the principal markets of the United States and Canada which represent the exchange and its members exclusively. In this way the exchange is

able to exercise careful supervision over the distribution of the products of its members and also to secure daily information with regard to conditions in the various markets. The exchange has a number of departments which undertake different lines of work. Thus, the sales department looks after the marketing of the fruit; the traffic department takes up matters relative to transportation; the field department assists in the standardization of the fruit and its preparation for market, and also in securing new members; the advertising department handles the work of advertising the products of the members; and the legal department keeps the exchange and its members informed with regard to legislation affecting the industry.

Supplies needed by the growers are purchased through a separate organization known as the Fruit Growers' Supply Co. This company reports handling a business of over $4,000,000 during the year ending August 31, 1916. The supplies purchased by the members through this organization include box shooks, labels, tissue wraps, spray materials, fertilizers, and other packing-house and orchard supplies.

CALIFORNIA ALMOND GROWERS' EXCHANGE.

Unsatisfactory conditions surrounding the marketing of almonds led to the organization of the California Almond Growers' Exchange. The first almond growers' association was organized almost 20 years ago and similar organizations were formed from time to time. As these organizations found that they could not accomplish a great deal individually, it was decided to unite, and as a result the California Almond Growers' Exchange was established in 1910. When first organized the exchange consisted of 11 associations made up of about 230 growers, while at the present time there are 18 associations with a total membership of about 1,000.

The purpose of the exchange is to secure a fair price for the product of the member associations at as low a cost of marketing as possible. Through further centralization, duplication of sales machinery is avoided, more efficient distribution can be secured, and a general control of the product makes advertising on an extensive scale possible.

The California Almond Growers' Exchange consists of a number of local nonstock associations with a membership fee ranging from $1 to $2.50. The local associations are formed in communities where sufficient almonds are grown to make this advisable, and the associations thus formed affiliate with the central exchange. By special arrangements, growers in districts where there are no local associations may market through the exchange. A contract date is set after which no growers' tonnage will be accepted for sale. In this way a fairly accurate estimate of the prospective crop is secured which enables the sales department of the exchange to make arrangements for placing the crop.

Pools are maintained for each variety of fancy grade and the expenses of each pool are kept separate and charged to the almonds in that pool. The almonds that are not of the fancy grade are sold separately. Sales are made over a large part of the United States and as many as 600 wholesale dealers have handled the organization's output in one season. A nut-shelling plant has been erected, and it is planned to develop the eastern demand for shelled almonds. The present annual volume of business is about $750,000, which will be increased within the next few years because of the large acreage planted to this crop which as yet is not in bearing.

THE DELTA CREAMERY CO., CALIFORNIA.

The Delta Creamery Co. was formed in 1910. Its membership is composed of dairymen and the business is operated for their mutual benefit. The returns from products handled by the company have been much more satisfactory than those received when the members marketed them individually.

The creamery has established a wholesale house in San Diego and at present about one-third of its output is marketed through this outlet with good results. It is planned to extend this method of selling so that the entire output can be sold in this way. The manager states that he believes the creamery owes its success in a large measure to its efficient employees and to the businesslike methods used in conducting the operations.

THE FLORIDA CITRUS EXCHANGE.

The Florida Citrus Exchange is a cooperative nonstock association which was formed on account of unsatisfactory conditions surrounding the marketing of the citrus fruit of Florida. Before this organization was formed each grower attended to the marketing of his own fruit and, as a consequence, proper supervision was lacking and sufficient attention was not given to grading and packing. Most of the packing was done in sheds, barns, and similar places, and little attention was given to the appearance of the fruit. During a period of six years a number of packing houses were built, and at present the Florida Citrus Exchange with its allied membership, has about $600,000 invested in such plants. An idea of the growth of the exchange is obtained from the statement that about 700,000 boxes of fruit were handled during its second year, while in 1915 it handled over 2,000,000 boxes. At first the loss on account of decay was large, but because of improved methods this loss has been greatly reduced, until at the present time it is comparatively small.

The exchange has been instrumental in securing new markets for Florida fruit. In the early days of the organization fruit was shipped to but 18 or 20 markets, while at the present time there are approximately 135 agencies throughout the United States and Canada which

handle the output. During the last four years $250,000 has been spent in advertising the brands of the exchange. It is considered that this money has been well spent, as a reputation has been built up by proper grading and standardization which has been brought to the attention of many dealers and consumers, thus increasing the demand and resulting in greater consumption and better distribution.

The Florida Citrus Exchange consists of four divisions: First, the individual growers; second, the local associations made up of individual growers; third, the subexchanges made up of local associations; fourth, the central exchange made up of the subexchanges. The growers are the producers and the owners of the entire business. The local associations look after the picking, hauling, packing, and loading of the fruit belonging to its members. The subexchanges act as forwarding agents for the associations. The central exchange takes care of the selling, collecting, advertising, and kindred matters.

FARMERS' UNION OF MAINE.

The Farmers' Union of Maine was organized in 1912 as a result of a movement started by the Bureau of Markets and Supplies of the State Agricultural Department. A number of local associations were formed, which in turn formed a central organization called the Farmers' Union of Maine. At present there are over 70 local unions, every county in the State being represented by one or more unions. A local union becomes affiliated with the central organization by the purchase of five shares of stock at $10 each.

The local unions began the shipping of potatoes in 1912 and shipped about 250 carloads during that season. Early in 1915 the union secured a stall in the Boston and Maine Railroad produce house in Boston and placed a man in charge. A total business of $250,000 through this house is reported for the year 1915.

There was a demand among the farmers for supplies such as grain, flour, and feed, and the manager of the union succeeded in organizing the Farmers' Union Grain and Supply Co., which contracted with a private wholesale concern to handle supplies for the union. This company did a business of $250,000 during last year. In the fall of 1915 the local unions voted to buy the private wholesale house, each local giving its note for $500. It is estimated that the savings will pay the interest and retire the notes in about five years.

The Farmers' Union has effected a saving to the farmers in the matter of contracting for fertilizers. It had been customary for the farmers to purchase a large amount of these on credit, which meant the payment of considerably more than the cost price. The union was able to make a contract at a lower price than individual farmers were paying, and this new price was instrumental in reducing the cost to all the farmers.

The local unions have erected 23 warehouses or shipping houses, 25 grain stores, 3 grocery stores, and a gristmill. A wholesale grocery house and a flour mill are under consideration. The gross business during 1912–13 was $324,000 and in 1914–15 it was $800,000, an indication of the rapid growth of the business.

THE LITCHFIELD DAIRY ASSOCIATION AND THE LIVE STOCK SHIPPING ASSOCIATION, MICHIGAN.

During the winter of 1910–11 the patrons of the local creamery at Litchfield, Mich., became dissatisfied with the prices paid them for butter fat. As a result the farmers purchased the creamery, and it has been conducted on the cooperative plan since that time. The annual volume of business has increased from 125,000 pounds of butter to 600,000 pounds. The creamery has been very successful and now has approximately 600 patrons, to whose cooperation, the manager states, the success of this enterprise is largely due. Other factors which have contributed to its success are good markets for its output, modern equipment, and efficient management.

Encouraged by the success of the creamery, the Live Stock Shipping Association was organized as a separate company by practically the same farmers who are interested in the creamery. The manager of the creamery is also manager of the Live Stock Shipping Association, and the business of both enterprises is handled from the same office. Members ship their stock on regular shipping days to the terminal markets in carload lots. Returns, less actual cost of handling and a small reserve fund, are prorated to each member. All stock shipped is marked and sold according to grade. This association is one of the earliest live-stock shipping associations and one of the most successful.

MINNESOTA COOPERATIVE DAIRIES ASSOCIATION.

The Minnesota Cooperative Dairies Association was organized in the summer of 1907 to bring about better marketing conditions among Minnesota creameries. It is a capital stock organization, and the shares are held by a number of cooperative creameries. In 1908 the association appointed an agent in Chicago to handle the butter consigned, and in 1909 similar arrangements were made with agents in New York and Philadelphia. As the agents appointed were regular butter dealers in these markets, this method of marketing did not differ materially from the method commonly employed.

It was the original plan of the association to have its own butter houses at the principal markets and to sell the output of the member creameries through them. In accordance with these plans a distributing office was opened in New York in the summer of 1915. On account of the short time this venture has been in operation it is not possible to say how successful or far-reaching the results will be.

THE OZARK FRUIT GROWERS' ASSOCIATION, MISSOURI AND ARKANSAS.

The Ozark Fruit Growers' Association is found in southern Missouri and northern Arkansas. The principal products marketed are strawberries and peaches. The organization consists of a central association which markets the fruit of a number of local associations affiliated with it. The secretary reports that there are 500 members, that the capital stock is $2,000, divided into shares of $1 each, no member owning more than 10 shares. Several hundred carloads of strawberries and peaches are marketed annually. The total business transacted in 1915 amounted to approximately $600,000.

This association has been successful in standardizing its products and making its brand known to the trade. A new venture recently undertaken is the use of various trade papers in advising the trade generally of the association's output through advertisements carried during the marketing season. Marketing conditions and returns to growers have been much more satisfactory since the creation of this sales agency. As in the case of most successful fruit associations, better distribution has been obtained, together with a standardization of output and sales methods.

TILLAMOOK COUNTY CREAMERY ASSOCIATION, OREGON.

Previous to 1904 both the private and cooperative cheese factories of Tillamook County marketed their output individually by shipping to Portland dealers. This method was unsatisfactory because there was not a proper distribution, and as a result the dealers took advantage of the gluts in the market during the season of heavy production. In 1903 the Tillamook factory adopted the plan of distributing the output among several cities, according to demand. This venture was so successful that several plants appointed a sales manager to handle their output in a similar manner. The success of these plants was an impetus to cooperation, and gradually most of the private factories were taken over by the farmers.

In 1909 nine of the farmers' cheese factories organized the Tillamook County Creamery Association. The association engaged an inspector whose duties included general supervision over the cheese making, regular visits to each factory, and the giving of suggestions and lending of assistance where needed. This proved to be a wise move, as it has made the factories more efficient and has resulted in a product of better quality and greater uniformity. The association has a trade-mark for all cheese which measures up to the association standard when inspected.

The factories also cooperate in having a secretary-salesman who at the present time keeps the books and looks after the marketing of the product from 20 of the 23 factories in the county. The secretary receives frequent reports from the inspector and from the cheese

makers and is therefore at all times in a position to know the amount of cheese to be sold. He keeps in touch with the dealers and also with the eastern markets. The arrangements made with the dealers call for prompt payments, which enable the factories to pay their patrons regularly, and this is considered an important factor in the success of the venture. It is stated that it is not an uncommon thing for the sales to average over $3,000 a day in periods of high production. The business of the federation for 1914 amounted to approximately $568,000.

THE EASTERN SHORE OF VIRGINIA PRODUCE EXCHANGE, VIRGINIA.

The Eastern Shore of Virginia Produce Exchange was organized in 1900 for the purpose of marketing the products of the farmers living in the two counties that form the Virginia part of the peninsula between Chesapeake Bay and the Atlantic Ocean. This is a truck-farming district; the leading crops are Irish and sweet potatoes, strawberries, cabbages, and onions. The exchange markets the products of approximately 3,000 farmers, or about two-thirds of the total output of the territory in which it operates. The annual business includes the sale of 8,000 to 10,000 carloads of Irish potatoes, 2,500 to 3,000 carloads of sweet potatoes, and from 100 to 300 cars each of strawberries, onions, and cabbages. The total annual volume of business is from 5 to 6 million dollars. The exchange deals with over 1,300 wholesale buyers, distributed among about 500 cities in about 40 States and Provinces.

The right to sell produce through the exchange can be secured by becoming a stockholder, by being a tenant of a stockholder, or by purchasing a "shipping privilege," which costs $1. The exchange has a central office, but there are a number of shipping points, as the territory is divided into 35 local divisions and each division has from one to four loading stations. Each local division elects a stockholder as a director for the general board of directors. The board of directors has supervision over the exchange, but in the main the work of management is left to the general manager and the secretary-treasurer. Each division elects a local agent to look after the work in that division. In addition, there are inspectors for each shipping point, but they are selected by the board of directors instead of by the local growers, in order to insure efficient and uniform inspection. The central office keeps in touch with the local agent to ascertain the probable amounts to be loaded at each shipping point day by day and later he is informed of the actual amount loaded. Thus the central office can see that the proper cars are provided and find markets for the products loaded. An effort is made to finish all the business each day. The local inspectors pass on the products as they are loaded; if they are up to standard they are permitted to carry the exchange

trade-mark; if not, they are loaded in a car of unbranded products. The central office takes care of the selling and forwards the proceeds to the local agents, who in turn make out the checks for the growers, payment being made within 24 hours after delivery of the goods. Under this system the growers do not have to wait for their returns. The association is able to do business on this basis, as a large surplus and good credit provide funds to cover payments to growers for all products delivered but unsold. Its present surplus is about $150,000, and this, together with a paid-up capital of $42,000, gives the exchange an ample working capital. Hereafter part of the net earnings will be returned to the growers in accordance with the amount of business transacted with the association.

The exchange makes an extensive use of the telegraph in selling products. Information with regard to the markets is secured daily from salesmen and representatives in the various market centers. In addition to the salesmen, brokers are also employed in effecting sales and in a large number of cities direct telegraphic communication with wholesalers is maintained. The fact that the exchange spends about $20,000 annually for telegraph service shows how important this form of communication is. The sales are for the most part made f. o. b. loading point; consequently the buyer assumes the risk of delay and normal deterioration in transit. Losses that are not included in this risk, and losses resulting from occasional bills that are impossible to collect, are borne by the association.

The expenses of the business are met by charging a 5 per cent commission on the produce sold by the exchange and a 3 per cent commission on a small quantity of produce that is turned over to selling agents, which consists principally of odd lots and off-grade goods sold in near-by markets. The amount sold in this way never exceeds one-tenth of the total.

This organization has brought about an intelligent distribution of the products of its members and has greatly expanded the territory serving as a market for the products of the region. The inspection service has resulted in standardization which insures good produce to the consumer and good prices to the producer.

THE SHEBOYGAN COUNTY CHEESE PRODUCERS' FEDERATION, WISCONSIN.

The Sheboygan County Cheese Producers' Federation was organized on account of dissatisfaction among the farmers with the prevailing methods of marketing. There was a widespread feeling that the prices on the Plymouth Cheese Board were fixed and that the farmers were not receiving as much as they should. A number of meetings of farmers were held and in the summer of 1913 cheese producers' associations were organized at over 40 of the cheese factories, and

these united to form the Sheboygan County Cheese Producers' Federation.

In July, 1913, the federation appointed a manager and prepared to engage in active business. It was found, however, that all the available storage space had been previously engaged, making it impossible for the federation to start immediate operations. Another farmers' organization known as the Federated Farmers' Warehouse Co. was then formed and a warehouse and cold-storage plant was erected and made ready for use in the spring of 1914. The Cheese Producers' Federation then rented the warehouse from the Farmers' Warehouse Co. and engaged in business early in 1914.

The method of procedure adopted was to sell the cheese independently of the local cheese board. At first the federation had difficult work because of the opposition from some dealers and cheese makers, and also because the new company was not known, but a trade was gradually worked up by sending out a large number of letters to cheese buyers. From April 1 to December 31, 1914, 6,125,480 pounds of cheese were handled by the federation. A charge of one-fourth of 1 cent a pound was made to defray expenses. The total sales amounted to $887,501.69. The figures for the year 1915 were not available at the time the federation reported, but a larger volume was handled than during the previous year.

TABLE IV.—*Summary of reports of 653 farmers' marketing organizations, showing paid-up capital and members, fees, value of buildings and equipment, and value of assets in excess of liabilities.*

Kind of business.	Number reporting.	Paid up capital and membership fees.	Building and equipment.		Assets in excess of liabilities.[1]	
			Number reporting.	Amount.	Number reporting.	Amount.
Grain elevators	328	$2,553,463	326	$2,857,555	328	$4,361,875
Average		7,785		8,765		13,380
Creameries and cheese factories	172	716,996	174	1,199,424	173	1,093,339
Average		5,331		6,893		6,320
Fruit and produce	84	1,672,311	76	993,215	91	2,411,318
Average		19,908		13,069		26,499
Cotton warehouses and gins	26	179,778	27	204,772	26	321,146
Average		6,915		7,584		12,351
Miscellaneous	43	456,057	35	205,792	42	740,675
Average		10,606		5,885		17,635
Total	653	28,578,605	638	5,460,758	660	8,928,453
Average		43,765		8,559		13,528

[1] Paid-up capital stock and membership fees not taken into account as liability.

FINANCING AND BUSINESS PRACTICES.

Information with regard to financing and business practices was secured from some 700 typical farmers' organizations from a special survey. A summary of the reports is shown in Table IV. This table gives for each kind of organization the amount of paid-up capital and members' fees, the value of buildings and equipment, and the amount of assets in excess of liabilities. Much material was secured also by means of personal visits to organizations throughout the country and by interviews with bankers and others during the years 1914 and 1915.

The financing of the business operations is one of the important features in a cooperative enterprise and a weakness in this feature is the cause of many failures. The methods of conducting the business, products handled, distance from markets, and various other elements require that the plan of financing be suited to local conditions. For this reason no "cut and dried" plan, unless well suited to local conditions, should be adopted by new organizations.

TABLE V.—*Amounts borrowed and sources from which obtained, of 401 farmers and cooperative marketing associations, by classes.*

Kind of organization.	From banks.			From commercial firms.			From individuals.		
	Number reporting.	Amount.	Number reporting but not giving this item.	Number reporting.	Amount.	Number reporting but not giving this item.	Number reporting.	Amount.	Number reporting but not giving this item.
Elevators	154	$1,040,950	16	47	$722,813	17	10	$36,500	2
Average		6,759			15,379			3,650	
Creameries	26	56,650	4				2	4,000	
Average		2,177						2,000	
Fruit and produce	63	1,115,275	3				1	1,500	
Average		17,703						1,500	
Cotton warehouses and gins	10	65,750	2	1	500				
Average		6,575			500				
Tobacco	2	85,000							
Average		42,500							
Miscellaneous	13	39,900	1				5	125,700	3
Average		3,069						25,140	
Total	268	2,403,525	26	48	723,313	17	18	167,700	5
Average		8,968			15,069			9,317	

TABLE V.—*Amounts borrowed and sources from which obtained, of 401 farmers and cooperative marketing associations, by classes*—Continued.

Kind of organization.	From banks and commercial firms.			From banks and individuals.			From commercial firms and individuals.		Total number reporting.	Number reporting amount borrowed.	Total amount borrowed.
	Number reporting.	Amount.	Number reporting but not giving this item.	Number reporting.	Amount.	Number reporting but not giving this item.	Number reporting.	Amount.			
Elevators	17	$218,200	1	33	$296,500		1	$20,000	298	262	$2,334,963
Average		12,835			8,985			20,000			8,912
Creameries				1	6,000				33	29	66,650
Average					6,000						2,298
Fruit and produce				8	2,116,155				75	72	3,232,925
Average					264,519						44,902
Cotton warehouses and gins				1	1,750				14	12	68,000
Average					1,750						5,666
Tobacco				1	50,000				3	3	135,000
Average					50,000						45,000
Miscellaneous				5	33,347	1			28	23	198,947
Average					6,669						8,650
Total	17	218,200	1	49	2,503,752	1	1	20,000	451	401	6,036,485
Average		12,835			51,097			20,000			15,054

FARMERS' GRAIN ELEVATORS.

The capital of farmers' grain elevators is in most cases only enough to provide the means of doing business, with very little in excess available as working capital. A considerable sum of money is required during the rush marketing season, since the elevator usually pays cash for the grain as it is delivered by the farmer. Several days elapse before returns for grain shipped are received, and often grain accumulates in the elevator. The little working capital the elevator has does not go far in paying for all the grain delivered. It is necessary to secure financial assistance from outside sources such as banks, commission firms, and individuals.

Using as a basis the average amount required from outside sources to transact the business of marketing the members' grain as shown by the reports from 262 elevators (Table V), it is a conservative estimate to place the total of the amounts borrowed in 1914 by the farmers' grain elevators at approximately $30,000,000, the greater part of which was for short periods. This amount, while large in itself, is small when compared with the total value of the products marketed.

Security for loans obtained.—Out of 291 organizations reporting 99 gave company notes as security for loans obtained, 82 gave no security other than agreements to ship certain amounts of grain to commission houses making the loans, 8 gave mortgages on the

elevator and equipment, 5 used company notes indorsed by individuals, 12 used warehouse receipts of grain in storage, and 85 were required to give personal security of responsible individuals who were usually officers of the company or well-to-do members.

These reports show that as organizations at least one-third of the elevators reporting have no credit that is acceptable to bankers other than that which is given by responsible individuals who assume a personal responsibility. No cooperative business organization should be so conducted that it is necessary for a few members to assume large personal risks to carry on the enterprise which is of benefit to all members. Members should assume a liability proportionate to the benefits received or the amount of business which they do through the organization.

Interest.—Two hundred and ninety-eight elevators report interest rates as follows:

Number reporting	6	71	1	110	61	14	5	10	8	2	4	5	1
Rate, per cent	5	6	6½	7	8	10	8–10	6–7	7–8	6–8	5–6	5–7	5½–7

From these figures it is shown that over one-third of the elevators reporting pay 7 per cent for funds with which to carry on their business. Seventy-one secure funds for 6 per cent; and 14 are required to pay 10 per cent, which high rate in most cases is due to the lack of approved collateral security, such as will be accepted by bankers generally. Several elevators have overdraft arrangements with the banks, paying from three-fourths of 1 per cent to 1 per cent per month on these overdrafts. If funds can be secured in any other way this practice should be discouraged. It is clearly brought out from these reports that rates of interests vary in the same territory, as, for example, Minnesota elevators are paying rates ranging from 6 to 10 per cent. Two companies within 10 miles of each other borrow from local banks, one paying 7 per cent and the other 10 per cent.

In the majority of cases where funds are obtained from commission firms the rate charged the elevator is 6 per cent, while in some cases as much as 8 per cent is charged. In an investigation conducted by the Office of Markets and Rural Organization, in collaboration with the University of Minnesota, it was found that of 158 elevators in the State borrowing funds, 51 per cent are financed wholly or in part by commission men, the average rate of interest charged being 6.74 per cent; 71.5 per cent are financed partially by local banks, the average rate being 7.39 per cent; and 13 per cent also borrowed from individuals, usually farmers, at the average rate of 6.25 per cent.

Length of loans.—Most of the loans made to elevators by banks and individuals are for short periods of from one to four months, or during the heavy marketing season. Forty-one elevators report securing loans payable on demand. Where funds are advanced by commission firms the business is handled on open account and after the year's business is closed final settlement is made. Thirty-five elevators secured loans for improvements on 12 months' time.

Some 14 elevators have an arrangement with the company's bank whereby sums not in excess of a certain amount are advanced to the elevators to take care of the business, interest being charged only on funds as advanced. By using this plan, interest is not paid on a large balance.

Advances to members on warehouse receipts.—Of 326 elevators reporting, 62 make advances to members on warehouse receipts. These advances range from small amounts to as high as 75 per cent of the market value of the grain. Two hundred and sixty-four report no advances.

As a rule, it is considered inadvisable to make advances to members on stored grain, as a practice of making these advances brings the elevator into a phase of the banking business which can better be done by the local banks. When borrowing from a bank, the patron of an elevator is required to pay interest on the borrowed funds although he may object to paying the elevator for a similar loan. He considers that since the elevator is in possession of his grain, it is not entitled to interest on money advanced, which he may assume as part payment on his property. As a matter of fact the advance is not a part payment, but purely a loan, since the title to the grain remains his, and he has been given a warehouse receipt. With all its advantages accruing to the profit of the holder, it is clear that loss of interest to the elevator on the money advanced becomes a charge against all the members of the association to the direct benefit of the individual borrowing member, a principle which can not be considered cooperative in any sense. Aside from this, the complications in accounting brought about by this practice are unfortunate. When patrons require loans from the elevator, such loans should be made an open account, or a personal note should be given. In both cases interest should be charged in accordance with the prevailing rate.

Sentiment and practice with regard to the storing of grain vary in the different States in accordance with the variety of the prevailing crops and the sentiment of the terminal market in which the sales are made. In the southwestern and eastern sections of the grain belt many elevator companies forbid storing, and the practice is discouraged generally. In the northwestern grain States storing and

hedging prevail in about 95 per cent of the elevators. Primary elevator capacity is not sufficient to hold all grain offered for storage during the height of the season. This fact has made it necessary for elevators to sell stored grain and to secure protection by hedging in the terminal markets. In certain instances elevator managers have taken advantage of the presence of the stored grain in the elevator and have speculated in futures to the direct loss of their employers because of inefficient methods of bookeeping. The adverse sentiment which prevails in some producing sections with regard to grain storage is partially due to such losses.

An elevator which is financed by a commission firm is handicapped in some instances in that it is impossible to take advantage of other markets which may from time to time offer better prices than can be obtained in the one in which the commission firm is located. Elevators not dependent in any way upon the commission house can ship first to one market, then to another, and in this way promote competition among the commission men in securing the best prices possible. It must be remembered, however, that the commission houses have served a useful purpose in the financing of the farmers' elevators in that they sometimes gave financial aid when it was impossible to to secure it elsewhere. Elevators are turning more and more each year to local sources for their funds, which is a fortunate arrangement, and it has been demonstrated that the elevator which is able to finance its operations without securing any outside help is in a position to obtain the best results. As soon as possible an elevator, by the accumulation of a surplus, should place its business in such shape that but little outside financial assistance is necessary. Where outside assistance is needed, it is preferable to obtain it from the local bank, using as security the company's surplus, and the general moral rating secured by conducting the business on a conservative and efficient basis.

FARMERS' CREAMERIES AND CHEESE FACTORIES.

The average farmers' creamery and cheese factory has little difficulty in financing its manufacturing and marketing operations, because of the plan of withholding payment to the producer until returns are received from products shipped. Manufacturing costs are small, and can be met from the returns received from sales. Where funds from outside sources are needed, the plant and equipment in most cases are amply sufficient to cover any loans secured and serve as a basis of credit.

As fast as milk or cream is received it is manufactured into butter or cheese, a large part of which is shipped immediately, very little being held in storage. Payment to the members is made for periods varying from two weeks to a month, on the basis of the average price

which the manufactured product brings, less the manufacturing, selling, and miscellaneous costs. For example, when two payments a month are made, the farmer will receive a check on the first of the month for his deliveries covering the period from the 1st to the 15th of the previous month, while on the 15th, payment will be made for deliveries from the 16th to the 30th of the previous month. In this way from two to four weeks elapse between the last delivery of the period and the time the settlement is made. This plan is followed by most of the country creameries and cheese factories in the United States, and there seems to be no objection on the part of the farmer to waiting from 15 to 30 days for his "cream check".

This system of making payments has met with such success among the cooperative plants that some privately owned factories have adopted the same plan. In some communities, however, cooperative creameries have been compelled to pay cash in order to compete successfully with privately owned plants that pay cash. In such cases it becomes necessary for the cooperative organization to secure funds from outside sources, or to create a surplus with which to cover the amount of the patron's products yet unsold for which the patron has been paid.

The amounts borrowed as shown by Table V, were required for meeting the general running expenses of the business, purchase of supplies, in some cases for the addition of new machinery and repairs, and in other instances for advances to members.

Of 35 creameries reporting on the security given for loans, 14 used company notes, and it was necessary for 14 others to have the personal indorsement of the directors; 2 obtained funds without any collateral security; 3 gave mortgages on the plant and equipment, and 2, which had cheese in storage, obtained funds on warehouse receipts. This report does not take into account sums borrowed for the construction of the factory and initial equipment. At the outset, where loans for these purposes are secured, members have paid in capital stock or membership fees sufficient to furnish a basis of credit for the amounts required, which usually are obtained from banks. In some instances machinery companies extend credit for the equipment.

Interest.—Thirty-two creameries report interest rates as follows:

Number reporting.....	13	8	8	1	2
Rate, per cent.....	6	7	7–8	8	10

The rates charged vary in different localities and depend upon the season, length of loan, and credit rating of the organization.

Length of loan.—Seven organizations use borrowed money during three months, and six require it from two to three months for advances to members in the summer, when deliveries of milk are heavy.

Seventeen report using borrowed funds from 3 to 10 months, while three are working throughout the year on borrowed capital.

Conclusion.—One great difficulty with the average cooperative creamery is that no provision is made for replacement of plant and machinery, and such repairs, replacements, and improvements as are made are charged against the deliveries of the members until paid, in as large amounts as the business will stand. This is also true in purchasing creamery supplies, such as tubs and salt. The returns of a few months' shipments, amounting to several hundred dollars, will pay for supplies which are used for a period of a year or more. The supplies which are used throughout the year should be prorated in such a manner that each member contributes to the cost of these supplies in proportion to his year's business with the organization.

Provision should be made by which a small amount is withheld from the returns, to be placed in a fund from which supplies, repairs, and improvements can be paid. This fund should also be charged with reserves for depreciation on plant and machinery. By using this method funds are available which make it possible to take advantage of cash discounts in buying supplies, and the cost of repairs and improvements can be adjusted equitably. In the setting up of a reserve for depreciation on the plant and equipment, replacements can be made without special assessments, and money is available to make such replacements when necessary.

It is surprising to find that but a small number of the farmers' creameries and cheese factories keep accurate accounting records, as heretofore attention has been centered in the manufacturing end of the enterprise. There is great need for an improvement in the accounting and general business management of these organizations. To show the true state of the business, expert audits are needed. The present unsatisfactory condition is recognized by bankers, and has affected the financial standing of the average farmers' creamery or cheese factory.

FRUIT AND PRODUCE ASSOCIATIONS.

Fruit and produce marketing organizations which pool the members' products generally require considerable sums of money in order to meet early marketing expenses and make advances to the growers, since in most cases several weeks elapse between the delivery of the members' product and the returns from the market. It is necessary for the growers to have funds with which to meet picking and packing expenses. Owing to the fact that independent buyers are willing to pay for the fruit upon delivery, the cooperative organizations at the outset have made as liberal advances to the members as possible. Various plans have been devised by which the association can secure funds from outside sources, since in many cases it is impracticable

to accumulate a surplus large enough to meet the early advances, and as the money is required only for a short time, if accumulated it would be idle a large part of the year.

Heretofore perishable products have not been considered as good collateral by bankers in making loans to business enterprises, but perishable products marketed through an efficient organization are now considered good security by many bankers in making loans to such cooperative marketing associations. The amount of money required in handling perishable products will vary according to the size of the business and the methods of conducting it. Some organizations which conduct merely a consignment business and do not make advances to the growers need but a small amount with which to meet general running expenses. In many cases this is provided by money received from the issuance of capital stock, membership fees, or the accumulation of a surplus a sufficient part of which is in such shape that it can easily be converted into cash. Many organizations have developed a large f. o. b. business, making drafts against shipments, making arrangements with the bank to honor them, and placing them to the credit of the association. This provides funds for immediate use and materially decreases the amount of outside help needed in financing. In cases where pools are made, advances to the members are often necessary as the pool may not be entirely closed until months after the first receipts come in. If it is possible to secure sufficient funds to make the early advances, the returns from shipments as received will take care of other amounts advanced to the growers. In some of the successful produce associations located in the Atlantic States, the organization buys the members' product outright, paying for it at the time of delivery. Under this plan of operation large sums are necessary.

Security for loans obtained.—Of the organizations reporting on the amounts borrowed as shown by Table V, 38 gave association notes as security. Forty-six gave personal security, that is, company notes indorsed by the directors or individual members who were considered financially responsible. Three reported having given no security, as bankers advanced funds on overdraft as required. Two found it necessary to give mortgages on the packing plants. One association has obtained about $300,000 from bankers on warehouse receipts covering nuts in storage. One secured a large loan from bankers on warehouse receipts for apples which were in storage.

These figures show that over half the organizations are able to borrow the funds necessary to make advances to members and to meet the expenses of the early marketing season, without security other than that which the organization can give, but a surprisingly large number, or 26 out of 72 organizations, are so organized that it

requires the personal security of directors or members to finance the operations.

Interest.—Seventy-six organizations report rates of interest as follows:

Number reporting.....	28	10	3	7	20	1	5	2
Rate, per cent.....	6	7	6–7	7–8	8	8–10	10	12

The rates of interest vary from 6 to 12 per cent. The two associations paying 12 per cent are badly in need of reorganization, and have had considerable difficulty in obtaining funds. The money which is procured is used for short periods and commands a high rate of interest. The associations on the Atlantic coast and in the Middle West as a rule secure funds at the rate of 6 per cent. Some of the larger organizations on the Pacific coast, owing to the large amounts which are borrowed, and their excellent business standing, are able to secure loans at from 6 to 7 per cent, while the rate which is charged individual producers by the banks is considerably higher. One of the large distributing agencies in the Pacific Northwest borrowed in the neighborhood of $400,000 in one season, most of which was advanced to members for deliveries of fruit. The five organizations which report a 10 per cent rate borrowed small amounts at the time of the year when money in farming communities commands a premium. However, these organizations have an insufficient amount of capital, and from a business point of view are paying more for the money than would be necessary if the organization were better financed and a surplus set aside to help carry the expenses of the early marketing season.

Length of loans.—Of 74 associations reporting on the period for which funds from outside sources were needed, 21 report that they require outside assistance only during three months, or during the early part of the marketing season; 7 require funds for 6 months; the others vary from 1 to 12 months, but the larger part of them borrow for a short period, or from 1 to 4 months.

It is possible only during years of good marketing conditions to make advances amounting to a high percentage of the total amount due the grower. In years when markets are bad it is necessary to be very conservative in making advances, as there is a possibility of overpaying. The fruit held in storage may not produce the returns which were anticipated in the early season. In 1913 it was possible for the large distributor in the Pacific Northwest to secure advances on apples. Some banks solicited this business and offered to loan as high as $1 a box at 6 per cent interest on all fruit in storage. During 1914, however, when the crop was large and markets were more or less demoralized, it was almost impossible to secure advances from

banks or cold storage companies. One large packing firm offered to make advances of 12½ cents per box at 8 per cent interest. Upon the improvement of conditions later in the season it was possible for the large distributors to negotiate a heavy loan on the basis of 35 cents a box. This was for only "fancy" and "extra fancy" grades, however, which were the best storage stock. In spite of this situation the stronger growers' organizations in the Pacific Northwest were advancing to the growers as much as 40 cents per box on all varieties, grades, and sizes, which was an exceptionally liberal advance, and showed that the organizations were in an excellent condition even in a period when marketing conditions were unusually bad.

TABLE VI.—*Annual business of several of the larger cooperative fruit and produce associations in the United States.*

Name of association.	Product handled.	Year.	Sales.
California Fruit Growers' Exchange.	Citrus fruits	Year ending Aug. 31, 1915.	$19,737,850.00
California Fruit Growers' Exchange Supply Co.	Members' supplies	Aug. 31, 1915	3,319,062.04
Eastern Shore of Virginia Produce Exchange.	Produce, potatoes principally	1914	5,752,690.36
Monmouth County Farmers' Exchange.	do	1914	1,323,443.02
North Pacific Fruit Distributors	Deciduous fruits	1913	3,372,196.30
Georgia Fruit Exchange	Peaches	1913	2,250,000.00
Florida Citrus Exchange	Citrus fruits	1913	3,500,000.00
Puyallup and Sumner Fruit Growers' Association.	Fresh fruits; operates 2 canneries.	1914	1,300,000.00
American Cranberry Exchange.	Cranberries	1913	1,500,000.00

AGENCIES WHICH ASSIST COOPERATION.

Several agencies take an active interest in cooperative organization and render assistance in forming new associations and in giving aid to organizations already formed. Among such agencies may be mentioned the United States Department of Agriculture, the State agricultural colleges and experiment stations, State departments of agriculture, State marketing bureaus, and various organizations, companies, and individuals.

THE UNITED STATES DEPARTMENT OF AGRICULTURE.

Office of Markets and Rural Organization.—The Office of Markets and Rural Organization has been devoting considerable attention to cooperative purchasing and marketing; assistance has been rendered to organizations already formed and to localities contemplating an organization. In a number of instances personal visits have been paid to organizations and localities and, after the local conditions have been studied, recommendations have been made as to desirability of organization, method of operation, and similar subjects. In other instances similar assistance has been given by means of corre-

spondence. General information is available for those who are interested in the advisability of organization, the proper form, and the method of organizing and operating under various conditions. Suggested forms of by-laws have been furnished to a large number of organizations.

The accounting systems of existing cooperative associations have been studied and uniform systems of accounts have been perfected for elevators, fruit and produce associations, live-stock shipping associations, creameries, stores, and other types. Assistance in installing these systems has been given in a number of cases and educational work is carried on relating to better systems of accounts and more businesslike methods in the operation of cooperative enterprises. The matter of financing these associations has been studied and methods have been worked out for various organizations.

In addition to the general survey of cooperative marketing in the United States made by this office, more detailed surveys have been made of certain classes of organizations. Several bulletins dealing with cooperation and cooperative marketing associations have been issued, and these have served as a means of furnishing a large number of people with information relating to the subject.

The Dairy Division, Bureau of Animal Industry.—The Dairy Division is interested principally in the production and manufacture of dairy products, and therefore keeps in touch with a large number of farmers' creameries and cheese factories. While most of the aid given to these plants is along manufacturing lines, considerable assistance is given also in the matter of creamery organization and management.

States Relations Service.—The States Relations Service indirectly through the county agents in the different States renders assistance to farmers' organizations and farmers desiring to organize. In many States the organization work of the agricultural colleges and experiment stations is carried on largely through the county agents.

WORK OF THE STATE AGRICULTURAL COLLEGES, STATE DEPARTMENTS OF AGRICULTURE, AND DEPARTMENTS OF MARKETS ALONG COOPERATIVE LINES.

Among the agencies engaged in furthering cooperation among farmers should be mentioned the State agricultural colleges, departments of agriculture, and departments of markets. Some of these institutions have taken an active part in organizing and assisting farmers' cooperative associations, others have furthered cooperation in an educational way, and a few have not up to the present time conducted any work of this kind. The scope of the work along cooperative lines at some of these institutions is now being widened. A number of agricultural colleges and State departments have recently undertaken work in marketing in cooperation with the Office of Mar-

kets and Rural Organization, United States Department of Agriculture, and some of these are giving special attention to cooperative organization problems. Information was secured from nearly all of the agricultural colleges and a number of State departments with regard to their activities along cooperative organization lines, but on account of the rapid expansion which is now taking place in this field of endeavor, it has not been deemed practicable to include a complete statement of the work that each one of these agencies is performing.

COOPERATIVE LAWS.

In the main the laws regulating the formation of cooperative associations in the various States are of two types. Some State laws are very general while others outline in detail the methods of forming an organization and managing its business. The general laws leave the details to be worked out by each individual organization, and supporters of this type of cooperative law believe that it is preferable because it allows an organization more latitude and gives greater assurance of securing the form of organization that is best suited to the needs of the community. Some argue that detailed laws attempt to force an idealistic form of cooperation on persons who are beginners in this field of activity, but supporters of the detailed laws maintain that the surest method of bringing about true cooperation is by outlining in full a method of organization that embodies the true principles of cooperation. There is no doubt that a detailed law insures greater uniformity of organization than it is possible to secure under a general law.

The differences between cooperative and noncooperative forms of organizations and the advantages and disadvantages of each type are questions which need careful study, for which few individuals have either the time or the facilities. If detailed cooperative laws had been in existence in all the States at the time when the farmers' organization movement started, it is unquestionably true that the proportion of truly cooperative organizations would now be very much larger than it is in those States where such laws are not in operation. Detailed laws serve to educate people along cooperative lines, and for that reason it is not necessary to wait until the beginner's stage has been passed before such laws are enacted.

Cooperative laws usually state the minimum number of persons that may organize and give the kind of business in which they may engage. The method of incorporation sometimes is outlined, although this is not always done, as in some States the associations are referred to the general corporation laws for this information. The laws often include restrictions regarding the board of directors and the officers. General laws usually leave questions concerning the capital stock for each association to decide, while detailed laws usually prescribe the

minimum and maximum amounts of capital stock, share values, the limit on individual ownership of shares, the issuance of shares, and the transfer of stock. Most of the laws recognize the importance of regulating the voting power, and the majority state that each member is to have one vote regardless of the amount of stock owned. Regulations concerning proxy voting and voting by mail are sometimes included.

The method of distributing earnings, if any, is, or should be, an important feature of cooperative laws. Some States leave this to each association to decide, while other States provide in detail the method to be followed. Laws of the latter kind usually limit the dividends on stock to a fair rate of interest, provide for a reserve fund and sometimes an educational fund as well, and for the division of the remainder of the earnings in the form of a patronage dividend. Some laws specify that patronage dividends are to be paid only to members, others include all patrons or leave it to be decided by the association whether or not patrons who are not members shall receive patronage dividends. Several States provide that patronage dividends to nonmembers shall be at a lower rate than to members. In a few instances the laws provide in detail the method of apportioning the earnings, but make it possible for the associations formed thereunder to revise this, if desired. Because of the fact that many people fail to recognize the desirability of a truly cooperative method of distributing the earnings of an association, it seems advisable that cooperative laws should make such a method obligatory. In this manner noncooperative organizations can be prevented from masquerading as cooperative, for, while some of the laws forbid organizations not formed under the cooperative law to use the word "cooperative" as part of their corporate name, if the method of distributing earnings is left to the association it may comply with the law and still be far from cooperative.

The points to be covered in the by-laws of cooperative organizations are sometimes outlined fully in the cooperative laws. In some cases provisions are made for the investment of the reserve fund and for the purchase of the business of other associations. Provisions are frequently made whereby existing organizations are permitted to reorganize under the cooperative law by complying with the requirements of the law. Other regulations often included are for dissolution of an organization, the requiring of annual reports, and the limiting of the use of the word "cooperative."

COOPERATIVE LAW SUMMATIONS.

The condensed summary of the State laws relating to the formation of cooperative organizations (pp. 66, 67) shows the main points of the State cooperative laws concerning which information has been

secured in this survey. Thirty States are represented in this digest, but there are 33 laws, as Colorado, Michigan, and Washington each have two separate acts, one providing for nonstock organizations and the other providing for organizations with capital stock. This table includes only a general outline of the State cooperative laws and it must not be considered as giving complete information with regard to these laws. Persons desiring to organize a cooperative association should study the statutes of the State in which the organization is to be formed, and if necessary legal advice should be secured in order that the organization may meet all the requirements of the law.

SCOPE AND PURPOSE.

Most of the laws provide in detail for the lines of business in which such organizations may engage, but a few of the laws make no restrictions in this matter, it being permissible to engage in any lawful business. Where the scope and purpose are fully outlined, the field covered is usually sufficiently broad to make possible organization for any lawful purpose.

MINIMUM NUMBER OF MEMBERS THAT MAY ORGANIZE.

All but three of the laws give the minimum number that may organize. Two of the States that do not mention this point provide for the minimum indirectly by specifying the number of directors and officers each association must have. Four of the laws provide that not less than 3 persons are necessary in order to organize; 5 is the most common minimum, for this is the requirement of 18 laws; four laws require not less than 7 members; one places the minimum at 10; one places it at 20; two require at least 25 members, and the other three make no mention of this point.

FILING OF ARTICLES OF INCORPORATION.

As will be noted from the summary, the methods of filing the articles of incorporation vary considerably in the different States. Twenty-two of the laws provide for filing the articles of incorporation with the secretary of state, and 14 of this number provide for the filing with some other official as well, usually the clerk of the county in which the principal place of business is located, the recorder of deeds, clerk of court, or county auditor. A few of the laws provide for filing with some local township or county officer only, as for instance the town clerk or the register of deeds. Four of the laws do not stipulate the method of filing, and three laws state that cooperative organizations shall be governed by the regulations provided for general corporations in this matter. Some of the laws have provisions in regard to the fees to be charged for filing, while in other States cooperative organizations pay the fee required of general corporations.

MANAGEMENT.

Twenty-two of the laws have clauses with regard to the management of the associations. Thirteen laws provide for a board of directors of not less than five members, and 11 of this number also specify what officers the associations shall have; four laws provide for a board of not less than three directors, and two of these also provide for the officers. One law states that the board of directors shall consist of not less than five or more than nine members; one law provides for a board of managers made up of the president, secretary-treasurer, and three directors, and in three of the laws the question of management is left to the association to be stipulated in its by-laws. The officers usually specified are president, one or more vice presidents, secretary and treasurer, or a combined office, secretary-treasurer.

CAPITAL STOCK.

The regulations relating to capital stock usually included in cooperative laws are the maximum and minimum amount of capital stock, the value of a share of stock, when stock may be issued, limits on individual ownership of stock, and restrictions on the transfer of stock. Seven of the cooperative laws provide for the organization of associations without capital stock. Eleven laws make some provision with regard to share value or with regard to the amount of stock that may be issued. Ten laws provide that shares are not to to be issued to stockholders until they are paid for in full. The amount of capital stock which one person may own is limited to $1,000 in 10 of the laws; in addition one of these laws specifies that one person must not own more than one-third of the stock outstanding, and another gives an association the power to change the limit if it desires to do so. Three of the laws state that the limit on individual stock ownership shall be as prescribed in the by-laws of the association. Four laws provide that a person must not own more than 20 per cent of the stock and one law limits this to 10 per cent. One law places the limit at one share, one at five shares, one at $400, and one at $5,000. Four laws do not touch on this matter at all and seven relate to nonstock organizations.

Eleven laws have provisions relating to the transfer of shares of stock, six of this number making it necessary to have the permission of the board of directors of the association before transferring the stock; four laws leave this matter for each association to include in its by-laws, and one law makes it possible for an association to have a clause in the by-laws providing that the association shall have the first opportunity to purchase any stock that may be for sale

It is frequently desirable for two associations to consolidate or for one association to hold stock in another and 14 of the laws have made some provision for this. Some of the laws limit the amount that

may be so invested, and some also provide for the authority to invest. The most common form is to limit the amount that may be thus invested to 25 per cent of its capital, and also to provide that it must be decided by a majority or a two-thirds vote of the members.

VOTING POWER.

One of the underlying principles of cooperation is that the members of an organization shall have equal voting power in the meetings. Twenty-three of the cooperative laws provide that each member shall have one vote, regardless of the amount of stock he holds. Two laws specify that each association shall set forth in its articles of incorporation or by-laws the rules to be followed in this matter.

Seventeen laws touch on the question of proxy voting, and voting by mail; seven provide for voting by mail if the votes so cast are accompanied by a written copy of the question voted on; five leave the questions of proxy voting and voting by mail for each association to stipulate in its by-laws; two permit both voting by mail and by proxy; one provides for voting by mail but forbids proxy voting; one forbids proxy voting but states that an association may provide in its by-laws for voting by mail; and one forbids proxy voting and does not mention voting by mail.

DISTRIBUTION OF PROFITS.

It is in the matter of distributing profits that so many organizations fall short of being cooperative. The cooperative laws vary considerably in their provisions with regard to this important point. Some laws merely state that the profits shall be distributed to those entitled to them, as provided in the by-laws, while other laws go into detail as to the manner of dividing the profits. The matter of distributing the profits is considered under four heads—the payment of interest on capital stock, the setting aside of a reserve fund, the provisions for an educational fund, and the distribution of profits in the form of patronage dividends.

Eleven laws leave the question of stock dividend or interest on money invested in shares of stock, to be decided by each association, and inserted in the by-laws; four laws do not mention this at all; six laws provide that the stock dividend shall not exceed 6 per cent, but four of the six grant the associations the privilege of changing this if they so desire; two laws give 8 per cent as the maximum rate; two laws place the maximum at 10 per cent, subject to revision by the associations; one places the maximum at 5 per cent, and one at 5 or 6 per cent.

Nine laws provide that the setting aside of a reserve fund shall be done in the manner stipulated by the by-laws; ten do not mention

the matter of a reserve fund; nine provide that not less than 10 per cent of the net earnings shall be set aside until a fund equal to 30 per cent of the paid-up capital has been accumulated, though six of the nine provide that the associations may revise this; one law provides for the setting aside of not less than 5 nor more than 25 per cent of the net earnings, and another from 10 to 25 per cent; another law stipulates that not less than 5 per cent shall be set aside until 30 per cent of the paid-up capital has been accumulated; one provides for the setting aside of 10 per cent until 20 per cent of the paid-up capital has been accumulated, and another for not less than 10 per cent until 50 per cent has been accumulated.

Eleven laws provide that the educational fund shall be as specified in the by-laws; 13 fail to make any mention of an educational fund; six provide that 5 per cent of the net profits shall be set aside for such a purpose, but four of the six grant the association the privilege of changing this; one law provides for an educational fund of not to exceed 5 per cent of the net profits; one provides for 2 per cent subject to revision by the associations; and one provides for the use of $2\frac{1}{2}$ per cent of the net profits for this purpose.

A question that arises in connection with the payment of patronage dividends is whether or not nonmembers shall have any share in the profits of an organization. Twelve cooperative laws state that nonmembers shall or may receive patronage dividends, and several of these specify that the rate to nonmembers shall be one-half the rate paid to members. Several of the laws do not touch on this point at all, and a number merely state that the by-laws shall decide in regard to the paying of patronage dividends.

DISSOLUTION.

Sixteen laws have provisions regarding the dissolution of organizations formed thereunder. Eight laws permit dissolution upon written request of two-thirds of the members; five provide that if an association has not paid any stock dividends for five consecutive years, five or more members may petition the court to have the organization dissolved; the law of one State provides that five members may petition for dissolution of an organization which has failed to pay stock dividends for three consecutive years; one law provides for dissolution by a majority vote; and one states that the procedure shall be the same as for corporations under the general corporation law.

ANNUAL REPORTS.

Sixteen laws specify that all associations formed thereunder shall make certain reports. Ten of these provide for an annual report to the secretary of state; two of the 10 also provide for reports to other departments, one to the State division of markets and

another to the agricultural college of the State; two laws require that creameries report to the dairy and food commissioner of the State; one law requires reports to be sent to the commissioner of agriculture; one specified that reports shall be filed with the county clerk and also with the State Bureau of Statistics of Labor and Commerce; two laws have provisions in regard to filing or posting of reports at the principal office of the organization.

PROVISIONS FOR EXISTING ORGANIZATIONS.

In 16 of the States the cooperative laws outline the method of procedure for existing organizations that wish to come under the cooperative law. The common method is by complying with the provisions of the law and filing with the secretary of state a sworn statement of the fact that the organization by a majority vote has expressed such a desire.

USE OF WORD "COOPERATIVE".

Eleven of the laws impose certain restrictions on the use of the word "cooperative" in the name of a concern in order to prevent its misuse. The usual requirement is that the word "cooperative" must not be used in the name of any organization formed after the passage of the cooperative law which does not comply with the requirements of that law.

DIGEST OF STATE COOPERATIVE LAWS.

ALABAMA.

Scope and purpose: Mutual aid, benefit, industrial.
Number who may organize: Five or more.
Filing of articles of incorporation: With judge of probate in county in which principal place of business is located.
Filing fee: Same as for other corporations. Judge of probate shall receive 15 cents per 100 words, and $2.50 for examining articles.
Management: Not less than five directors.
Capital stock: Not less than $5,000.

CALIFORNIA.

Scope and purpose: Any lawful business.
Number who may organize: Five or more.
Filing of articles of incorporation: Clerk of county in which the principal place of business is located, a copy with the secretary of state.
Filing of amendments: With clerk of county.
Capital stock: Nonstock.
Transfer of memberships: May be transferred by board of directors.
Voting: Each member one vote.
Voting by mail or by proxy: May be provided for in by-laws.
Distribution of earnings: According to by-laws.
Dissolution: Upon written request of two-thirds of the members.

COLORADO (NONSTOCK).

Scope and purpose: Production, preserving, drying, canning, shipping, or marketing of agricultural, viticultural, horticultural, dairy, or apiarian products.

Number who may organize: Three or more.

Filing of articles of incorporation: With secretary of state and recorder of deeds in county in which the principal place of business is located.

Filing fee: $15 to secretary of state.

Filing of amendments: With secretary of state and with clerk of county.

Capital stock: Nonstock.

Transfer of memberships: May be transferred with the consent of the board of directors.

Voting: Each member one vote.

Voting by mail and by proxy: No proxy voting. By-laws may provide for vote by mail.

Dissolution: Upon written request of two-thirds of the members.

COLORADO (CAPITAL STOCK).

Scope and purpose: Any lawful business.

Number who may organize: 10 or more.

Filing of articles of incorporation: With secretary of state.

Filing fee: Same as for general corporations.

Stock ownership: May be limited by by-laws.

Distribution of earnings: According to by-laws.

CONNECTICUT.

Scope and purpose: Purpose of trade, or any lawful mercantile, mechanical, manufacturing, or agricultural business.

Number who may organize: Seven or more.

Filing of articles of incorporation: With town clerk in town in which business is conducted.

Management: President, treasurer, and board of not less than five directors.

Capital stock: Not to exceed $50,000.

Issuance of stock: When paid for in full.

Stock ownership: Limited to $1,000.

Purchasing of business of other associations: Two or more associations formed under this act may consolidate.

Voting: Each member one vote.

Distribution of earnings: According to by-laws, provided that 10 per cent of net profits will be appropriated for contingent fund until this fund equals 20 per cent of capital stock.

Dissolution: Upon written request of two-thirds of the members.

Annual reports: To be made to the secretary of state.

FLORIDA.

Scope and purpose: Production, preserving, drying, packing, shipping, or marketing of horticultural and agricultural products.

Number who may organize: Three or more.

Filing of articles of incorporation: Same as for other corporations.

Management: Not less than three directors.

Capital stock: Nonstock.

Transfer of memberships: By permission of the board of directors.

Voting: As provided in the articles of incorporation.

Proxy voting: May be provided in by-laws.

Dissolution: Upon written request of two-thirds of votes.

ILLINOIS.

Scope and purpose: General mercantile, manufacturing, or producing business.

Number who may organize: Five or more.

Filing of articles of incorporation: With secretary of state.

Filing of amendment: With secretary of state and recorder of deeds in county in which principal place of business is located.

Management: Not less than five directors. Officers shall be president, vice president, secretary, and treasurer. The last two may be combined.

Capital stock: Shares not less than $5 or more than $100 in value.

Stock ownership: Limited to five shares.

Transfer of stock: By-laws may provide that corporations shall have first right to purchase any stock for sale.

Purchasing business of other associations: By a two-thirds vote of at least two-thirds of the members, the corporation may invest its surplus to the extent of 25 per cent of its paid-up capital in the capital stock of other cooperative associations; the board of directors may invest not to exceed 10 per cent of the paid-up capital in the same manner.

Voting by mail and proxy: Vote by mail to count if voter has been notified in writing and copy of question is attached to vote. Written proxies are permitted.

Distribution of earnings: According to by-laws.

Annual reports: Made to secretary of state before March 1.

Provisions for existing organizations: May come under this act by filing sworn statement that members have so decided by at least two-thirds majority.

Use of word "cooperative": No corporation formed after passage of act permitted to use the name "cooperative" unless complying with this act.

INDIANA.

Scope and purpose: Any lawful business.

Number who may organize: Twenty-five or more.

Filing of articles of incorporation: With secretary of state.

Filing fee: Same as for other corporations.

Stock ownership: May be limited by by-laws.

Transfer of stock: May be regulated by by-laws.

Distribution of earnings: According to by-laws.

Provisions for existing organizations: May come under act by filing declaration with secretary of state.

IOWA.

Scope and purpose: Agricultural, dairy, mercantile, manufacturing, or mechanical business.

Number who may organize: Five or more.

Filing of articles of incorporation and amendments: With secretary of state and the recorder of deeds of the county in which the principal place of business is located.

Filing fee: Ten dollars to secretary of state for filing articles, and $5 for amendments, provided that if capital stock is less than $500 the fee shall be $1. Recorder of deeds to receive the usual recording fee.

Management: Not less than five directors. Officers shall be president, one or more vice presidents, secretary, and treasurer. The last two may be combined.

Issuance of stock: When paid for in full.

Stock ownership: Not to exceed $1,000.

Purchasing of business of other associations: By a majority vote may invest not to exceed 25 per cent of its capital.

Voting: Each member one vote.

Voting by mail: Vote by mail to count if member has been notified in writing and copy of question is attached to vote.

Distribution of earnings: Subject to revision by associations, not to exceed 10 per cent dividend on stock, not less than 10 per cent of net profits until 50 per cent of paid-up capital is accumulated for a reserve fund, 5 per cent of net profits for an educational fund, patronage dividends to members and employes.

Dissolution: If no dividends are paid for five consecutive years, five members may petition district court.

Annual reports: To secretary of state before March 1.

Provisions for existing organizations: Filing sworn statement with secretary of state that this has been decided by a majority vote.

Use of word "cooperative:" No corporation formed after passage of this act shall use the name "cooperative" unless this act is complied with.

KANSAS.

Scope and purpose: Any agricultural, mercantile, dairy, mining, manufacturing, or mechanical business.

Number who may organize: 20 or more.

Filing of articles of incorporation: With secretary of state.

Management: Not less than five directors. Officers shall be president, one or more vice presidents, secretary, and treasurer. The last two may be combined.

Stock ownership: Not over 10 per cent of capital stock.

Voting: Each member one vote.

Distribution of earnings: According to by-laws.

Annual reports: Made to secretary of state.

Provisions for existing organizations: Filing sworn statement showing that association has decided by majority vote to come under this act and paying fees.

Use of word "cooperative": Organizations must not use title "cooperative" unless act is complied with.

MASSACHUSETTS.

Scope and purpose: Any agricultural, dairy, or mercantile business.

Number who may organize: Seven or more.

Capital stock: Not to exceed $10,000.

Stock ownership: Not to exceed $400.

Investing reserve: May invest surplus in buildings of association or lend to members on real estate mortgages.

Voting: Each member one vote.

Distribution of earnings: Capital stock dividends not to exceed 5 per cent; not less than 10 per cent of net profits for reserve fund until at least 30 per cent of paid-up capital is accumulated; not to exceed 5 per cent of net profits for an educational fund; patronage dividends paid to stockholders and may be credited to nonstockholders as payment on share of stock at one-half the rate to stockholders.

Provisions for existing organizations: By filing sworn statement that association has by a majority vote decided to come under this act and paying fee of $1.

MICHIGAN (NONSTOCK).

Scope and purpose: Any lawful purpose other than pecuniary profit.

Number who may organize: Five or more.

Filing of articles of association: With secretary of state and the clerk of the county in which principal business is conducted.

Capital stock: Nonstock.

Provisions for existing organizations: Any corporation not for pecuniary profit may reincorporate under this act.

MICHIGAN (CAPITAL STOCK).

Scope and purpose: Merchandise, agricultural, or manufacturing business.
Number who may organize: Five or more.
Filing of articles of incorporation and amendments: With secretary of state and clerk of county in which principal place of business is located.
Filing fee: Same as other corporations.
Management: Not less than five directors. Officers shall be president, vice president, secretary, and treasurer. The last two may be combined.
Issuance of stock: When paid for in full.
Stock ownership: Not over $1,000.
Voting: Each member one vote.
Voting by mail: Vote by mail to count if voter has been notified in writing and copy of question is attached to vote.
Distribution of earnings: Subject to revision by the association, 6 per cent stock dividends, 10 per cent of net profits for reserve fund until 30 per cent of paid-up capital is accumulated, patronage dividends may be paid to nonmembers at one-half the rate to members.
Annual reports: Made to secretary of state.
Provisions for existing organizations: May come under act by complying with its provision and filing sworn statement with secretary of state.

MINNESOTA.

Scope and purpose: Any lawful mercantile, manufacturing, or agricultural business.
Filing of articles of incorporation: With register of deeds of the county in which the principal place of business is located.
Management: President, treasurer, and not less than three directors.
Capital stock: Not to exceed $100,000. For creameries not to exceed $25,000.
Issuance of stock: When paid for in full.
Stock ownership: Not over $1,000.
Voting: Each member one vote.
Distribution of earnings: According to by-laws.
Dissolution: If no dividends are paid for five consecutive years five or more members may apply to district court.
Annual report: Creameries report to dairy and food department.

MONTANA.

Scope and purpose: Trade or any branch of industry, purchase or distribution of commodities for consumption, borrowing or lending money.
Number who may organize: Not less than three nor more than seven incorporators.
Filing of articles of incorporation: Secretary of state.
Filing fee: $5.
Capital stock: Shares not less than $10 or more than $5,000 each.
Stock ownership: One share each.
Voting: Each member one vote.

NEBRASKA.

Scope and purpose: Any lawful business.
Number who may organize: Not less than 25.
Filing of articles of incorporation: With secretary of state.
Filing fee: Same as for other corporations.
Stock ownership: According to by-laws.
Transfer of stock: According to by-laws.
Distribution of earnings: According to by-laws.
Provision for existing organizations: May come under act by filing sworn statement with secretary of state.

NEVADA.

Scope and purpose: Any lawful business.

Number who may organize: Five or more.

Filing of articles of incorporation: With secretary of state and clerk of county in which principal place of business is located.

Management: According to by-laws.

Capital stock: Nonstock.

Transfer of memberships: Memberships may be transferred by permission of the board of directors.

Voting: Each member one vote. Voting by mail may be provided for in by-laws.

Distribution of earnings: According to by-laws.

Dissolution: By written request of two-thirds of the members.

NEW JERSEY.

Scope and purpose: Any lawful mechanical, mining, manufacturing, or trading business.

Number who may organize: Seven or more.

Filing of articles of association: Approved by chief of bureau of statistics of labor and industries. Filed with clerk of county in which principal place of business is located.

Management: Not less than five directors. Officers shall be president, treasurer, and secretary.

Capital stock: Share value not to exceed $50.

Issuance of stock: When paid for in full.

Transfer of stock: According to by-laws.

Purchasing of business of other associations: May have interest in another society to the extent of one-third of its paid-up capital.

Voting: Each member one vote.

Distribution of earnings: According to by-laws.

Dissolution: Same as any other corporation.

Annual reports: Made to clerk of county and chief of bureau of statistics of labor and industries.

NEW MEXICO.

Scope and purpose: Production, preserving, drying, packing, shipping, or marketing of agricultural, viticultural, or horticultural products.

Number who may organize: Three or more.

Filing of articles of incorporation: As provided by State law.

Management: According to by-laws.

Capital stock: Nonstock.

Transfer of memberships: Not to be transferred without consent of board of directors.

Purchasing of business of other associations: Associations formed under this act may consolidate upon two-thirds vote of members. Two or more associations may make use of the same agencies.

Voting: According to articles of incorporation.

Voting by mail: According to by-laws.

Dissolution: Upon request of members representing two-thirds of total vote.

NEW YORK.

Scope and purpose: General producing, manufacturing, and merchandising business.

Number who may organize: Five or more.

Filing of articles of incorporation: Same as provided for other corporations.

Management: Not less than five directors. Officers shall be president, one or more vice presidents, secretary, and treasurer. The last two may be combined.

Capital stock: Shares of $5 each.

Issuance of stock: When paid for in full.

Stock ownership: Not over $5,000.

Transfer of stock: By written consent of corporation.

Purchasing of business of other associations: Not to exceed 25 per cent of its capital.

Voting: Each member one vote.

Voting by mail: Permitted if member has been notified of question and a copy is attached to vote.

Distribution of earnings: Stock dividends not to exceed 6 per cent, not less than 10 per cent of net earnings for reserve fund until 30 per cent of paid-up capital is accumulated, 5 per cent of net earnings for an educational fund, patronage dividends to members and employees and at one-half rate to nonmembers.

Dissolution: If no dividends are paid for five consecutive years, five or more members may petition supreme court of county.

Annual reports: Made to secretary of state.

Provision for existing organizations: Filing sworn statement with secretary of state.

Use of word "cooperative": Not to be used in name of any corporation formed after passage of this act unless act is complied with.

NORTH CAROLINA.

Scope and purpose: Any agricultural, dairy, mercantile, mining, manufacturing, or mechanical business.

Number who may organize: Five or more.

Filing of articles of incorporation and amendments: With secretary of state and clerk of superior court in county in which principal place of business is located.

Filing fee: $10 and fee allowed by law to secretary of state, $2 when capital stock is less than $1,000. Fifty cents to clerk of court. For filing amendments, $5, or $2 if capital stock is less than $1,000.

Management: Not less than five directors. Officers shall be president, one or more vice presidents, secretary, and treasurer. The last two may be combined.

Stock ownership: Limited to 20 per cent of paid-up capital stock.

Transfer of stock: According to by-laws.

Voting: Each member one vote.

Voting by mail and proxy: Vote by mail to count if accompanied by a copy of the question. Proxies must be in writing.

Distribution of earnings: Subject to revision by association, stock dividends not to exceed 6 per cent, not less than 10 per cent of net profits to reserve fund until 30 per cent of paid-up capital is accumulated, not less than 2 per cent of net profits for an educational fund, patronage dividends to members and employees and to nonmembers at one-half rate.

Annual report: Made to secretary of state and division of markets and rural organization.

Provision for existing organizations: Filing sworn statement with secretary of state.

Use of word "cooperative": Not to be used in name of any organization hereafter formed unless this act is complied with.

NORTH DAKOTA.

Scope and purpose: Any lawful mercantile, manufacturing, agricultural, or industrial business.

Filing of articles of incorporation: With secretary of state.

Filing fee: $10

Management: President, secretary, treasurer, and not less than three directors.

Capital stock: Not to exceed $50,000.

Issuance of stock: When paid for in full.

Stock ownership: Not over $1,000.
Voting: Each member one vote.
Distribution of earnings: According to by-laws.
Dissolution: If no dividends are paid in five years, five or more members may petition.
Annual reports: Creameries report to dairy commissioner.

OHIO.

Scope and purpose: Trade associations.
Distribution of earnings: According to by-laws.

OREGON.

Scope and purpose: Any lawful business.
Number who may organize: Five or more.
Filing of articles of incorporation and amendments: With secretary of state, clerk of county, and Oregon Agricultural College.
Filing fee: $10 to secretary of state, 25 cents per 100 words to clerk of county. For amendments, $5 to secretary of state and 25 cents per 100 words to clerk.
Management: President and four other directors.
Issuance of stock: When paid for in full.
Stock ownership: Not over one-fifth.
Purchasing of business of other associations: Not to exceed 20 per cent of its capital and reserve fund.
Voting: Each member one vote.
Voting by mail and proxy: May vote by mail. No proxy.
Distribution of earnings: Stock dividends not to exceed 6 per cent, not less than 5 or more than 25 per cent of net earnings for reserve fund, patronage dividends to nonmembers one-half the rate to members.
Dissolution: By written request of two-thirds of its members.
Annual reports: Made to secretary of state and Oregon Agricultural College.
Provisions for existing organizations: By filing sworn statement with the secretary of state.
Use of word "cooperative": Not to be used unless this act is complied with.

PENNSYLVANIA.

Scope and purpose: Productive or distributive business.
Number who may organize: Five or more.
Filing of articles of incorporation and amendments: With secretary of state and recorder of deeds of county in which principal place of business is located.
Filing fees: 10 cents for each 100 words to secretary of state and recorder of deeds.
Capital stock: Shares $5 to $25.
Stock ownership: $1,000. May be increased by vote of members.
Purchasing of business of other associations: By majority vote of members.
Voting: Each member one vote.
Voting by proxy: No proxy voting.
Distribution of earnings: Stock dividends 5 or 6 per cent (see law), not less than 2½ per cent of net profits for educational fund, patronage dividends to members and employees and to nonmembers at one-half rate.
Dissolution: By majority vote of the members.
Reports: Monthly reports to be posted in principal office.
Provision for existing organizations: May come under act by a majority vote.

SOUTH CAROLINA.

Scope and purpose: Agricultural, dairy, mercantile, mining, mechanical, or manufacturing business.

Number who may organize: Five or more.

Filing of articles of incorporation: With secretary of state.

Management: Not less than five nor more than nine directors. Officers shall be president, secretary, and treasurer. Last two may be combined.

Capital stock: Not less than $100.

Stock ownership: Not over one-fifth.

Purchasing of business of other associations: By a majority vote, reserve may be invested in capital stock of other associations not to exceed 25 per cent of its capital.

Voting: Each member one vote.

Distribution of earnings: May be revised by association, stock dividends not to exceed 6 per cent, not less than 10 per cent of net profits to reserve fund until at least 30 per cent of paid-up capital stock is accumulated, 5 per cent of net profits to educational fund, patronage dividends to shareholders, employees, and nonmembers at one-half the rate and may be credited on share of stock.

Annual reports: To commissioner of agriculture.

Provisions for existing organizations: Filing sworn statement with secretary of state.

Use of word "cooperative": Not to be used as part of name by any organization formed after passage of act unless act is complied with.

SOUTH DAKOTA.

Scope and purpose: Any agricultural, dairy, mercantile, mining, manufacturing, or mechanical business.

Number who may organize: Five or more.

Filing of amendments: With secretary of state.

Management: Not less than five directors. Officers shall be president, one or more vice presidents, secretary, and treasurer. The last two may be combined.

Stock ownership: Not more than $1,000.

Purchasing of business of other associations: By a majority vote, not to exceed 25 per cent of its capital

Voting: Each member one vote.

Voting by mail: Permitted if vote is accompanied by a written copy of the question.

Distribution of earnings: May be revised by association, dividends on capital stock not to exceed 10 per cent, not less than 10 per cent of net profits to reserve fund until 30 per cent of paid-up capital is accumulated, not to exceed 5 per cent of net profits for educational fund, patronage dividend to shareholders.

Provisions for existing organizations: Filing sworn statement with secretary of state.

TENNESSEE.

Scope and purpose: Buying and selling any agricultural products and dealing in merchandise.

Number who may organize: Seven or more.

VIRGINIA.

Scope and purpose: Any agricultural, dairy, mercantile, manufacturing, or mechanical business.

Number who may organize: Five or more.

Filing of articles of incorporation: With judge of circuit court, State corporation commissioner, secretary of the commonwealth, and clerk of circuit or chancery court.

Filing fee: To secretary of commonwealth and clerk of court.

Management: Not less than three directors. Officers shall be president, one or more vice presidents, secretary, and treasurer. The last two may be combined.

Stock ownership: Not to exceed $1,000.

Purchasing of business of other organizations: By majority vote, not to exceed 25 per cent of its capital.

Voting: Each member one vote.

Voting by mail: Permitted if vote is accompanied by a copy of the question.

Distribution of earnings: May be revised by association, stock dividends not to exceed 6 per cent, not less than 10 per cent of net profits to reserve until 30 per cent of paid-up capital stock is accumulated, 5 per cent of net profits for educational fund, patronage dividends to shareholders and employees and to nonshareholders at one-half rate.

Dissolution: If no stock dividends are paid for three successive years, five or more may apply to circuit court.

Use of word "cooperative": Not to be used as part of name by any organization formed after the passage of this act unless it complies with act.

WASHINGTON (NONSTOCK).

Scope and purpose: Any lawful purpose except carrying on of a busniess, trade avocation, or profession for profit.

Number who may organize: Five or more.

Filing of articles of incorporation: With secretary of state and county auditor of county in which principal place of business is located.

Filing fee: Same as for stock corporations.

Management: According to by-laws.

Capital stock: Nonstock.

Voting: All members have equal power.

Dissolution: Upon written request of two-thirds of the members.

Provisions for existing organizations: So deciding by a majority vote and filing statement with secretary of state and county auditor.

WASHINGTON (CAPITAL STOCK).

Scope and purpose: Any lawful business.

Number who may organize: Five or more.

Filing of articles of incorporation and amendments: With secretary of state and county auditor of county in which principal place of business is located.

Filing fee: $25 to secretary of state and 15 cents per 100 words to auditor. For amendments, $10 to secretary of state and 15 cents per 100 words to auditor.

Management: Not less than three directors. Officers shall be president, one or more vice presidents, secretary, and treasurer.

Issuance of stock: When paid for in full.

Stock ownership: Not more than one-fifth of stock.

Purchasing of business of other associations: By a majority vote of a majority of the stockholders.

Voting: Each member one vote.

Voting by mail: Permitted if accompanied by a written copy of the question.

Distribution of earnings: Capital stock dividends not to exceed 8 per cent, 10 to 25 per cent of remainder of net profits to reserve fund, patronage dividends to members, to nonmembers at one-half the rate to members.

Annual report: To secretary of state.

Provisions for existing organizations: Filing sworn statement with secretary of state.

Use of word "cooperative": Not to be used as part of name by any corporation not complying with this act.

WISCONSIN.

Scope and purpose: Any agricultural, dairy, mercantile, mining, manufacturing, or mechanical business.

Number who may organize: Five or more.

Filing of articles of incorporation and amendments: With secretary of state and the register of deeds of the county in which the principal place of business is located.

Filing fee: $10 to secretary of state and 25 cents to register of deeds. For amendments, $5 to secretary of state.

Management: Not less than five directors. Officers shall be president, one or more vice presidents, secretary, and treasurer. The last two may be combined.

Stock ownership: Not more than $1,000.

Purchasing of business of other associations: By a majority vote, not to exceed 25 per cent of capital may be thus invested.

Voting: Each member one vote.

Voting by mail: Permitted if copy of question accompanies vote.

Distribution of earnings: Stock dividends not to exceed 6 per cent of net earnings to reserve fund until 30 per cent of paid-up capital stock is accumulated, 5 per cent of net profits to educational fund, patronage dividends to stockholders and employees and to nonstockholders at one-half rate.

Dissolution: If no profits are paid for five or more years, five or more stockholders may apply to circuit court.

Annual reports: To secretary of state.

Provisions for existing organizations: Filing sworn statement with secretary of state.

Use of word "cooperative": Not to be used as part of name by any corporation organized after passage of this act unless it complies with act.

WYOMING.

Scope and purpose: Agricultural, dairy, live stock, irrigation, horticultural, mercantile, manufacturing, or industrial business.

Number who may organize: Five or more.

Filing of articles of incorporation and amendments: With secretary of state and clerk of counties in which business is carried on.

Filing fee: Same as for general corporations.

Management: Not less than three directors.

Issuance of stock: When paid for in full.

Stock ownership: Not more than $1,000 or one-third of outstanding stock.

Voting: Each member one vote.

Voting by mail or proxy: Not permitted unless provided in by-laws.

Distribution of earnings: May be revised by stockholders, not to exceed 8 per cent capital stock dividends, not less than 10 per cent of net earnings to reserve fund until 30 per cent of paid-up capital stock is accumulated, patronage dividends to nonmembers may be provided in by-laws.

Annual reports: Statement to be kept on file with the secretary of the association.

Use of the word "cooperative": Not to be used as part of the name unless this act is complied with.

THE CLAYTON AMENDMENT TO THE UNITED STATES ANTITRUST LAWS.

In preparing State laws authorizing cooperative organizations, consideration should be given to the United States antitrust laws, especially the amendment thereto commonly known as the Clayton amendment, which was passed by the Sixty-third Congress. Section

6 of this amendment has an important bearing on farmers' organizations because it exempts from the operation of the United States antitrust laws certain types of agricultural and horticultural organizations. Section 6 reads as follows:

> That the labor of a human being is not a commodity or article of commerce. Nothing contained in the antitrust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural organizations, instituted for the purposes of mutual help, and not having capital stock or conducted for profit, or to forbid or restrain individual members of such organizations from lawfully carrying out the legitimate objects thereof; nor shall such organizations, or the members thereof, be held or construed to be illegal combinations or conspiracies in restraint of trade, under the antitrust laws.

It is important that State laws authorizing cooperative corporations should be so framed or amended as to confer ample authority upon such organizations to comply with the provisions of the Federal statute.

Investigation shows that many farmers' organizations operate on the capital stock plan because the laws of the State under which they exist require capital stock, although a majority of them choose the capital stock plan because it is thought that such a plan is best adapted to securing the necessary capital for financing them. The legal difficulties under existing State laws for noncapital stock organizations should be eliminated as their presence influences the creation of capital stock organizations which as a matter of law can never possess the benefits and privileges conferred by section 6.

The sentiment in the public mind that capital stock is essential for the procurement of necessary capital, while widespread, is not well founded, as is demonstrated by the success and great borrowing capacity of various noncapital stock cooperative organizations in existence in the United States at the present time.

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